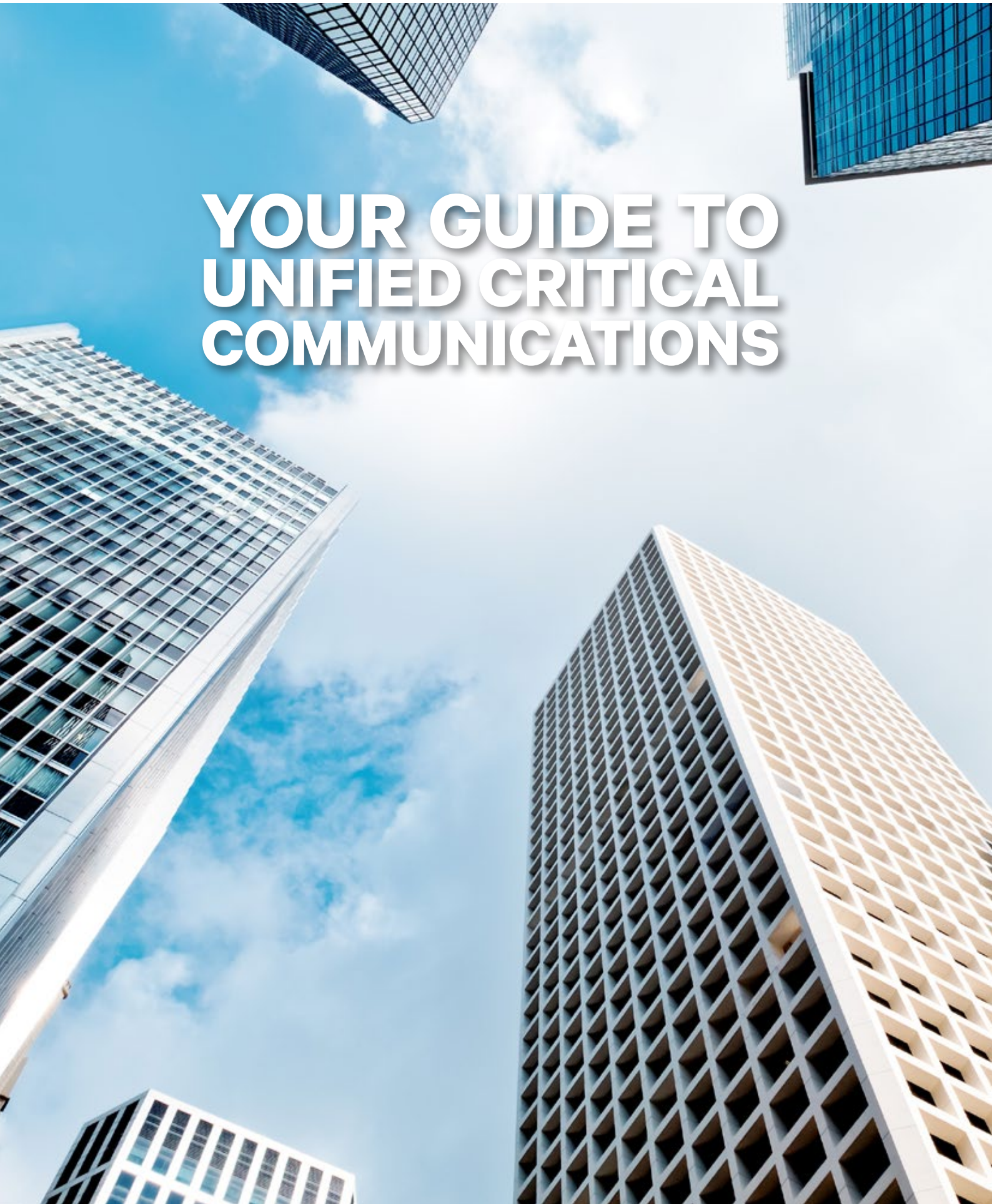
Tait Unified Solutions



YOUR GUIDE TO UNIFIED CRITICAL COMMUNICATIONS


Where are unified critical communications heading?
What is the place of radio in a unified communication environment?
What are the benefits of a unified approach?
What solutions are available right now?
Who is already benefiting from a unified approach?
How can you future-proof your communications investment?
Why is unified critical communications the future of mobile communications?
Which factors are most important when choosing a technology vendor?

MOBILE COMMUNICATION IS CHANGING

Now, mobile applications can share information, video and text between workers and the back office, often simultaneously sharing with multiple operatives. And a new generation of field workers (and greater ICT influence) demand a choice of devices to gain immediate access to this information. While quality PMR voice communications remain vital, they no longer meet every communication need.

To meet all these needs:

- you could commit resource to multiple networks, but this approach merely multiplies the technical disadvantages and overheads,
- you could choose a single network type, leaving you vulnerable to the disadvantages of your chosen technology, and reducing your interoperability options,
- you could specify an uber-device to use across multiple networks, but unfortunately, attempts to develop a single platform for multiple networks remain elusive,

  OR

- you could integrate several technologies to coexist seamlessly, and deliver the maximum benefit and value of each technology.

Only the last option is genuine unified critical communications — connecting individual devices across PMR, LTE and WiFi, we create a seamless "network of networks". For each communication, the system automatically selects the best network, with no user input required.

So, no matter which device you choose, your message — voice, text, video, images, applications, or any combination — will be transferred efficiently, securely, reliably, seamlessly and in real time, across a unified critical communications network.

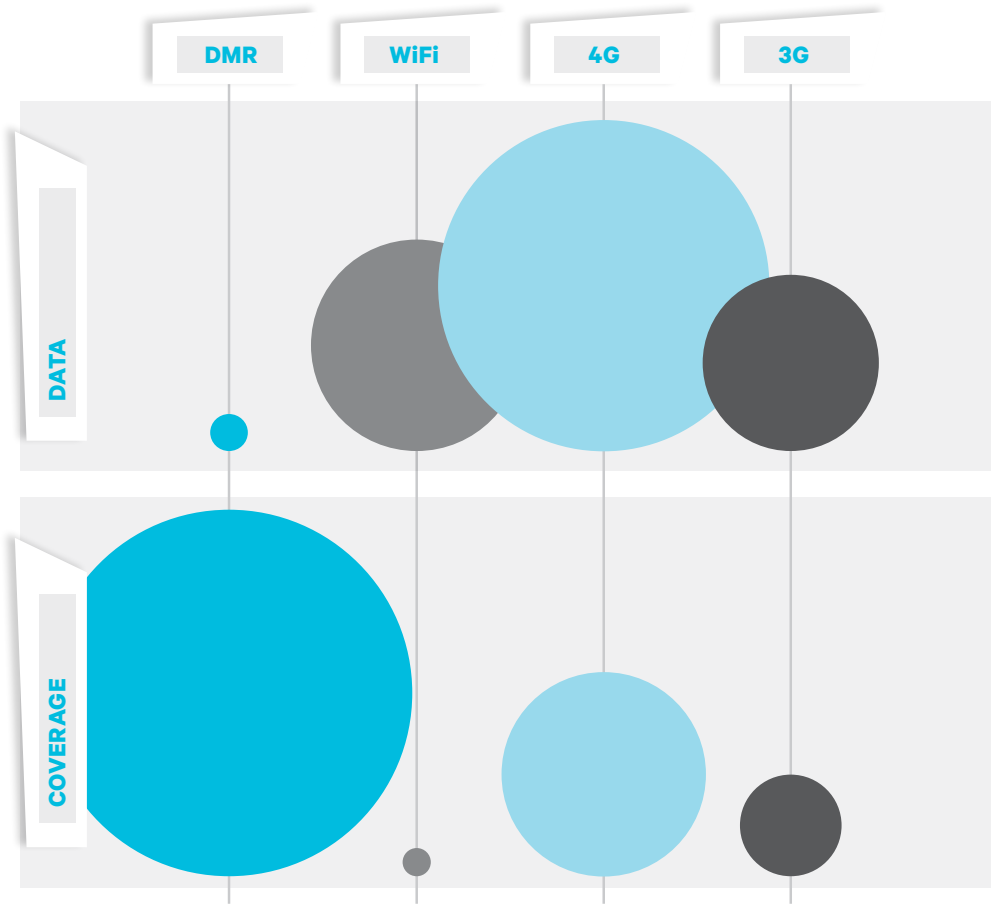
Tait clients protect and support communities, power cities, move people and products, harness resources and save lives all over the world. Whatever business you are in, we can work with you to create and support your critical communication solutions.

SCENARIO:
In a hospital environment, vital information transmitted via WiFi on smart devices can potentially disrupt life-saving technology. Unified critical communication can transmit information safely, securely and reliably – in real time. Management can review activity and calculate related cost; staff experience more efficient communication so patients are treated faster.

THE CASE FOR UNIFYING YOUR CRITICAL COMMUNICATIONS

Comparing the relative strengths of common bearers, we can see that no single wireless network can connect mobile staff, vehicles, users and applications to meet your business needs.

To meet complex communications requirements, employing multiple bearer networks becomes the reality. Unified critical communications create a network of networks, so that no matter where you are, and what conditions you are working under, the system will choose the best bearer.



HOW CAN UNIFIED CRITICAL COMMUNICATION SUPPORT YOUR BUSINESS NOW?

TAIT PTTOC SOLUTION: ROAMING ACROSS NETWORKS

Many workers must currently carry both a smartphone and a portable radio. Smartphones are great for their broadband data capabilities, but the public networks they depend on may be unreliable in rural areas, and overcrowded during events. Private radio networks have great wide-area coverage, security, and resilience but may struggle in densely built up areas – particularly in buildings with energy-efficient glass and thick concrete walls.

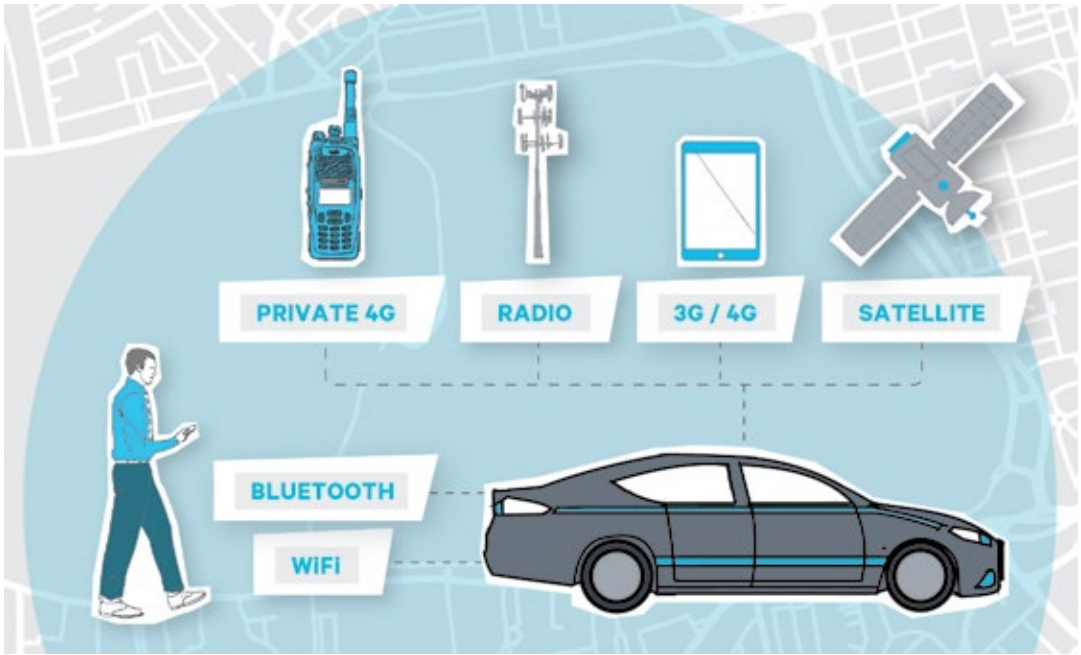
The Tait PTToC solution connects users to radio, cellular, and WiFi networks on a single device; intelligent software automatically detects the best available bearer networks, even changing networks during a call if the original network ceased to work.

SCENARIO:
Security guards or valets at large events and sport stadiums must manage large crowds. When an incident or accident threatens, communicating in the fastest, most intuitive way is often via smart devices. With a secure, reliable PMR network at the core, unified critical communications provide a cost-efficient and practical solution.

TAIT UNIFIED VEHICLE: CONNECTIVITY, COMPUTING POWER, AND APPLICATIONS ON THE MOVE

Few things are more frustrating than not being able to communicate when you need to. As technology convergence increases complexity and puts added demands on your communication system, Tait Unified Vehicle creates a local network of networks, including PMR, WiFi, wireless broadband, Bluetooth (and more), using your vehicle's mobile radio as a base.

Users can communicate when they need to, using their preferred device and the best available bearer, from a local network providing connectivity wherever they go.



TEN WAYS UNIFIED CRITICAL COMMUNICATION CAN BENEFIT YOUR ORGANIZATION

INCREASE OPERATING EFFICIENCY

A Unified Critical Communications network can be configured to select the appropriate bearer for each communication, based on your criteria. You establish the priority – reliability, cost, power usage, timing, or availability - to meet your business requirements.

INCREASE PRODUCTIVITY

No longer are you restricted to communicating with your workers via status messages or voice. Unified voice and data across multiple networks means you can share information with the right people, by the fastest and most reliable method.

ENHANCE INTEROPERABILITY

With a choice of bearer always available, you can communicate dynamically with contractors and other agencies and organisations, across any network you have in common. You can even implement a secure BYOD policy for your workers.

REDUCE OVERHEADS

Without the overhead of a single, all-encompassing network across your entire coverage area, you are free to choose the quality and cost criteria for any group, situation or function.

INCREASE COVERAGE

No single technology can provide communication across the diverse terrain, variable demand and proliferating data that your organisation needs. Designed to your exact requirements, a unified critical communications system minimizes coverage “black spots”.

SCENARIO:
Fire departments optimizing real-time information to manage fire grounds can use vehicles as a point of connectivity to strengthen and broaden the signal. Firefighters can use headsets, leaving their hands free to navigate, direct and operate; real-time information reaches control centers sooner, for faster decision-making. Communications can be recorded, and instructions given to supporting units.

KEEP WORKERS SAFE

Workers who understand and trust their communication networks feel safer, and more confident. They know that should an accident, injury or emergency occur, they are not alone. Worker safety features, location data and alerts can operate across different networks and provide real time visibility, so you know instantly when and where help is needed.

TAILOR SOLUTIONS TO YOUR NEEDS

Different industries and regulations, different operating processes, different environments, and the availability of different network types will all influence your choices.

FUTURE-PROOF YOUR INVESTMENTS

What's available today is just the beginning. The right technology choice can mean the difference between stranded investments, and communications that continue to take advantage of open standards and future developments.

SCALE YOUR SOLUTION

A unified approach to communication means you can keep your options open. You can start small today, then add more network bearers, new developments and applications as your organisation grows, your options expand, or your requirements change.

SAFEGUARD COMMUNICATIONS RESILIENCE

Loss of communication at any level can be costly – even life-threatening. Building redundancy into a typical single-bearer solution carries a high capital overhead too. A unified solution gives you multiple levels of redundancy, avoiding any single point of failure automatically.

UPGRADING TO DIGITAL RADIO TO UNIFY YOUR COMMUNICATIONS

DMR is a proven, modern digital radio standard that offers a clear migration pathway from your current analog network. It is highly compatible with the latest ICT architectures, making it the ideal radio platform for your unified critical communications solution. But that's not all.

OPEN STANDARDS

DMR is a mature, well-defined and trusted open standard, with an increasing presence around the world. Open interfaces deliver innovation and ease of integration, while interoperability between different manufacturers' equipment is validated through the active, multi-vendor DMR Association.

CAPACITY

DMR doubles the frequency capacity of existing analog systems – and some competing digital standards. Migrating to DMR, many operators find their current frequency licenses will meet their future communication needs.

INTEGRATION

Tait DMR integrates easily into enterprise systems, and prepares you to take advantage of the machine-to-machine and Industrial Internet of Things connectivity.

DATA

Applications range from simple notifications and messaging, location awareness, remote asset management, and user ID, to outage and fault detection and packet data services. Voice is simply one such application.

VOICE

While it's easy to focus on the business benefits of DMR data, it also delivers uncompromised voice communication. Familiar work groups and call protocols can remain, but with undiminished voice clarity, right to the edges of coverage.

SCENARIO:
Utilities need their workers in the field to be in constant contact with the back office. Utility staff are familiar with portable radios, but PTT can be difficult when working at heights, or in an emergency. Smart devices operating across a DMR network can ease work flows and save lives.

WHAT TO LOOK FOR WHEN CHOOSING A TECHNOLOGY VENDOR

COMMITMENT TO OPEN STANDARDS

Open standards offer choice; you avoid the pitfalls of proprietary hardware and software, you can operate multi-vendor radio fleets, and upgrade to the devices and infrastructure that best meets your needs. Open-standards vendors collaborate and innovate to bring solutions to market sooner. And flexible, defined interfaces avoid the risk of stranded investments.

INNOVATION

A culture of innovation and a track record of incorporating new technolgoy into product lines ensures a sound technology base for exciting new developments in the future.

TECHNOLOGY PARTNERING

Technology partnering is collaborative, and cooperative. By complementing our own products and services with applications and systems from a range of technology partners, our customers are assured the best solution, more choice, and lower integration overheads.

DESIGN, IMPLEMENT, MANAGE

Service continuity is critical. Working with a vendor who can design, implement and manage the process from end to end, customers can enjoy an enduring, collaborative partnership, throughout their project life cycle.

INTEGRITY AND TRUST

Committing to a new communication solution is an important investment. A trusting relationship with your vendor ensures ongoing support for the life of your network. You need to know that they have years of experience and a sound reputation with positive clients who vouch for their integrity.

WHAT YOU HAVE READ HERE IS JUST THE BEGINNING

Tait Unified Solutions are not static solutions that you implement and leave – the investment you make today will never be stranded by new developments. One of the greatest benefits of Tait Unified Solutions is that your solution can develop and advance as upgrades, new features, and applications create new and exciting opportunities.

SCENARIO:

For building managers in high rise buildings, equipping and training a large team of security and building technicians with portable radios can be costly and inefficient. Using smart devices over a radio network provides cost-effective, safe, reliable communications from basement to penthouse, that can also reach on-call guards or technicians off site, via the public 4G network.

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