

You're in safe hands with Telstra's critical communications solutions, supporting Australian industry across public safety, mining, infrastructure and logistics.

# Critical Communications



# Mission critical communications can be life-saving

Mining, oil and gas operations.  
Transportation and logistics. Public safety and emergency services.

Although these industries vary markedly, they share some similar challenges. For mining organisations, connectivity is crucial for staff both above and below ground in order to maintain site safety. The same can be said for oil, gas and infrastructure projects; environmental conditions that are often remote and challenging, with communication vital to operational awareness and safety.

For public safety, responders and emergency services teams need to stay in constant contact so they can protect people and property. And again, in circumstances that are difficult and life-threatening.

Then there is the coordination and management of large fleets within the logistics and transport industry, the imperative being the safety and wellbeing of drivers whilst maintaining an efficient business.

All of these industries need high bandwidth and low latency that can support dynamic communication over wide-ranging distances and often challenging conditions.

Telstra offers near-real time, low latency, secure and high availability solutions needed to ensure efficient and effective operation and management, maintenance and scaling of mission critical communications.

Telstra supports mission critical communications with:

- Narrowband Communications – for example, LMR (Land Mobile Radio), an essential in many Government Radio Networks
- Private Mobile Broadband Networks – strong adoption across logistics, supply chain, infrastructure and public sector
- Australia's largest mobile network
- Satellite – Partnerships with ViaSat, Starlink and OneWeb



### **TasGRN**

In July 2023, the Tasmanian Government Radio Network (TasGRN) became ready for operational use. It brings together eight organisations, from Tasmania Police and Tasmania Fire Service to Ambulance Tasmania, Tasmanian SES, Sustainable Timbers Tasmania, Tasmanian Parks and Wildlife, Hydro Tasmania, and TasNetworks, into one unified digital radio network.

This consolidated network improves emergency services and government agency communications, helping to provide the highest levels of safety for communities as well as emergency responders, and is now one of the most advanced integrated emergency radio networks across Australia.

### **Australian Rail Track Corporation (ARTC)**

The ARTC has partnered with Telstra for many years to meet their critical communication needs.

In 2014, the ARTC switched off its old analogue communications network to support the transition to a single nationwide platform. A new National Train Communication System (NTCS) powered by Telstra's 3G network was established, covering all 8,500 km of the ARTC's national rail freight network, and more than 70 base stations were built specifically for ARTC, supplemented by a Telstra Iridium Satellite solution.

With the exit of 3G, ARTC are taking the opportunity to uplift their communications system for train control to 5G.

Telstra is also supporting the new Inland Rail element of the ARTC's rail network and will build out coverage, providing improved connectivity for rural communities on the line.

# On the front line

Telstra's history of innovation in critical communications solutions includes:

- Telstra LANES - Designed to provide dedicated, priority LTE network access to emergency services during large scale incidents and ensure that critical information is shared in real time with and between emergency service operatives who need to make quick and accurate decisions in the field.
- LMR SatCOW (Cell on Wheels) – Deployable radio network coverage, as used by TasGRN.
- Aqura Technologies (a Telstra Purple company) awarded the 'Best use of critical communications in mining, oil and gas' at the International Critical Communications Awards in 2023.
- Low Earth Orbit (LEO) satellite solutions - Telstra has announced significant deals with OneWeb and Starlink, helping to expand coverage and connectivity on the move for emergency services agencies, mining, oil and gas sectors via LEO services.
- Geostationary Orbit (GEO) satellite solutions – Telstra has partnered with ViaSat, the global leader in GEO satellite technology, to support its new Asia Pacific satellite constellation.
- In addition, the Telstra 5G Innovation Centre in Southport (Queensland) explores Public Safety use cases and collaborates with Public Safety Mobile Broadband (PSMB) partners to co-develop solutions.

## Getting started

Bring us your ideas or business goals and we'll work with you to develop a smart solution. Whether it's secure and reliable communications during natural disasters and other emergencies, or dedicated mission critical networks for your organisation, we can help.

Contact your Telstra account representative for more details.