

CASE STUDY: ARMIDALE DUMARESQ COUNCIL NEW SOUTH WALES, AUSTRALIA

THE CUSTOMER

Armidale Dumaresq Council is situated in the heart of the New England Tablelands in NSW, Australia, which has a population of approximately 25,000 people. The council is made up of three operational divisions: business and corporate administration, public infrastructure, and sustainable planning and living. The council is responsible for utility services including water, sewerage and waste, and maintenance of their road network.

SITUATION

With the amalgamation of the Armidale City and Dumaresq Shire Councils, the new Armidale Dumaresq Council was struggling with a congested communications network which had reached end-of-life and was becoming near impossible to maintain.

Andrew Levingston, Plant Fleet Manager, explains: "We identified that our communications system was approaching 20 years of age and we needed to update it. We had some challenges that we needed to address, including location services, as well as ensuring complete coverage within the Armidale Dumaresq Council region. Coverage is a challenge in itself with 1,635 square miles to cover over steep terrain."

Following a comprehensive tender process Armidale Dumaresq Council awarded Vertel, a Tait Communications dealer the contract to migrate their analog network to P25.

RESPONSE

Vertel used its extensive design and engineering expertise to create a solution that would work to increase the safety and efficiency of Council staff operating throughout the region of the Armidale Dumaresq Shire.

The three-site TaitNet P25 digital conventional network, designed by Vertel, incorporates Tait P25 TB9100 base stations, replacing the Council's out-dated analog network. Vertel also constructed a new digital radio tower and designed the associated digital network to address the specific coverage challenges presented by the geographically remote area in which the Council operates.

The solution included worker-safety features such as location services software provided by Data Over Radio, which allows for the GPS tracking of terminals. Additional safety features included a vehicle emergency alarm system and integration with the existing phones system — each feature a vital part of the total solution to ensure staff safety on the road.

Armidale



SOLUTION OVERVIEW

- TaitNet P25 conventional network
- Location Services from Data Over Radio
- VHF P25 terminals with GPS functionality — TP9100 and TM9100
- Vertel radio towers and microwave back-haul linking
- Omnitronics P25 dispatch console

BUSINESS BENEFITS

- P25 open-standards technology provides choice and unlocks long-term value
- Integration with the existing phones system
- Network designed for improved coverage, increasing worker safety



OUTCOMES

The Tait P25 digital communications solution, running over a Vertel next-generation network, is bringing real organisational benefits for the Armidale Dumaresq Council. Since the implementation of the Tait network cross-team communication has increased resulting in greater day-to-day workforce management, more effective use of resources, and enhanced efficiency across the whole operations of Armidale Dumaresq Council.

The P25 system is also helping to increase the safety of the council's utilities and road network staff.

Mr Levingston explains, "The most important outcome for us is increased safety for staff. We operate across a large, mostly rural area, and a lot of our staff work in small, remote crews."

Armidale Dumaresq Council now has the use of location services, specifically GPS and AVL applications. This means that, in an emergency situation, emergency services can be dispatched to an exact location as quickly as possible.

"Due to increased coverage, we are now able to drastically reduce our reliance on mobile phones for operations," adds Mr Levingston. "Truly reliable communications is now a reality, and that will make a real and lasting difference to the way we operate as a team, as well as the outcomes we achieve for the community.

"Our decision to go digital, specifically P25, was based on the need to future-proof our communications system and allow for the Council's growth. The P25 network will provide long-term sustainability for the Council's operations, as the design of the system easily lends itself to expansion when required.

"The Tait network means there's a lot more cross-team communication happening, which means better use of resources in the field and greater day-to-day workforce management and efficiency across the whole organisation," concludes Mr Levingston.



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Andrew Levingston Plant Manager Armidale Dumaresq Council

Tait is a global leader in designing, delivering and managing innovative communication solutions that help utilities and public safety organizations to keep the lights on and communities safe.

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