



ST JOHN AMBULANCE, WA, AUSTRALIA

tait
communications

THE CLIENT

St John Ambulance Western Australia (St John) is a charitable, not-for-profit, humanitarian organization serving the community through first aid services and delivering the State's ambulance service. St John is the preeminent provider of pre-hospital care in Western Australia (WA). St John employs over 1,500 staff and activities are delivered with the support of over 4,500 volunteers, across the state's 965,255 square miles (2.5million square kilometers) – the largest area in the world covered by a single ambulance service.

SITUATION

St John wanted to make sure that their staff and volunteers had the right tools and equipment to deliver vital services to the community. A metro radio network upgrade was deemed necessary and requirements of this upgrade included improving the clarity and coverage of their communications, and employing measures to help keep patient information confidential.

The charitable organization had high targets to achieve, in order for them to deliver the highest quality of care possible, including responding to 90% of all emergency calls within 15 minutes.

RESPONSE

St John chose to upgrade their existing metro analog network to a new 11-site Tait P25 digital communications network. The Tait P25 digital network provides St John with saturated coverage and improved audio clarity between almost 800 ambulance staff around the Perth metropolitan area.

To address St John's requirement for information privacy, Tait provided P25 TM9100 radios with secure AES encryption, so eavesdroppers are unable to access confidential patient information and St John staff can communicate with confidence.

As the P25 open standard is designed for interoperability, the Tait P25 solution allowed St John to choose the best-suited P25 radio terminals for their unique requirements, regardless of manufacturer. St John now operates a number of P25 radios from various manufacturers including Tait P25 TM9100 mobiles and hand-held control heads in their vehicles.



LOCATION

WA,
AUSTRALIA



EXPERTISE

EMERGENCY
SERVICES

SOLUTION OVERVIEW

- ▶ Tait 11-site P25 conventional digital metro network
- ▶ P25 TB9100 base stations
- ▶ P25 TM9100 mobiles and hand-held control heads
- ▶ AES encryption
- ▶ Interface to Omnitronics dispatch console systems

BUSINESS BENEFITS

- ▶ Improved audio clarity and greater coverage with P25 digital technology
- ▶ Increased privacy of information with P25 AES encryption
- ▶ P25 interoperability for greater choice and custom solutions
- ▶ Reduced cost of ownership with intelligent TB9100 CSS
- ▶ Increased reliability with in-built remote monitoring



The Tait P25 network provides more reliable mission-critical communications due, in part, to the backbone of each network site – the Tait P25 TB9100 base station. The Tait TB9100 base station features remote monitoring with built-in IP-connectivity and Customer Service Software (CSS) that allows network administrators to remotely diagnose any potential site problems from a central location without having to physically visit the site. The CSS also has the ability to set automatic monitoring of alarms to enable more efficient use of maintenance resources for looking after the network, reducing the total cost of ownership.

The TB9100 base stations feature a gateway that links to St John's Omnitronics DX64 dispatch console systems. Omnitronics worked closely with Tait to interface the base stations and dispatch console systems via MDC1200 signaling.

St John Ambulance Technical Services Director, Ashley Morris said, "The radios will provide greater effective radio coverage and the encrypted signal ensures that private patient information could be securely communicated between paramedics and receiving hospitals.

"The radio system upgrade is a step forward for St John Ambulance, ensuring greater network visibility for technicians, and improving the ability to troubleshoot and address problems before they become a bigger issue."



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