Capability Statement

Brisbane
Dalby
Mackay
Moranbah
Who we are

RCS Telecommunications was created in 2013 through the merger of Queensland Communications and Networking (QCN) and Radio Communications Solutions (RCS). The merged entity brings together communications networking, managed services and support skills with radio design, implementation and support capabilities. The organisation has a significant regional presence in Queensland and is the largest provider of private Digital Two Way systems in Australia.

What we do

RCS Telecommunications is a leading Queensland based company providing fixed and wireless voice and data services. The company provides a complete end-to-end service that covers design, implementation and support. A key offering is the provision of managed services that includes 24 x 7 support and all service management components as defined within the ITIL model.

Remote and geographically difficult locations are a specialty of the company through our radio expertise and localised presence in regional Queensland. RCS Telecommunications has recently been granted a telecommunications carrier licence, which assists us in providing services to areas, which have little or no communications infrastructure.

RCS Telecommunications is a Premium Motorola Dealer and a Cisco Select Partner.
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Our vision

RCS Telecommunications aim is to be a strategic partner with our customers. We recognise that communications services are a strategic tool used by innovative companies to achieve business objectives such as productivity improvements and cost reductions.

The culture of RCS Telecommunications people is centred on the delivery of required business outcomes for our clients. This culture is fostered and encouraged though all aspects of our business especially that of service delivery and support activities.

*RCS Telecommunications’ vision is to be recognised as a superior service delivery and support organisation that delivers exceptional business outcomes for our clients in both simple and complex environments.*

Our capability

RCS Telecommunications has a multi-disciplined team of IT & communications architects and engineers, project managers and support personnel focussed on the delivery of business outcomes for our customers. We have a solid methodology for service provision as follows:

- Network design based on best practice processes
- Lab testing of solutions prior to implementation
- Detailed and rigorous project management
- Service Management based in the ITIL model
- Quality controlled installation, commissioning and documentation

We maintain a Network Management Centre in Brisbane. This centre provides proactive monitoring, remote access capability and a tier 1 to 3 support environment for staff actively engaged in managing our clients. We provide regional coverage with commitment to local support at the centre of our customer’s operational areas, providing rapid response capability.

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Our people

RCS Telecommunications has over 45 employees located throughout Queensland and we maintain fully staffed offices in

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RCS Telecommunications personnel are highly trained professionals, many of whom live and are engaged in regional communities.

Our people are the reason for our success; it is their cohesiveness, and ability to deliver business outcomes that allows us to differentiate ourselves in the market.

Our values

Safety
We are committed to the safety of staff and others and all our actions have this key commitment

Partnership
We value our customer as a partner and recognise that the way to create value is to assist our customers in delivering their business objectives

Innovation
RCS Telecommunications encourages innovation and the courage to lead change in our people. We recognise that this will deliver benefits to our customers and us.

Integrity
Say what we do & do what we say

Respect
Treat all people with respect and dignity
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Our markets

Mining, Energy, Gas

Utilities

Agriculture

Government

Our record

RCS Telecommunications brings a wealth of experience and expertise, examples of which are shown in the following case studies.

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**INDUSTRY:** Open-cut metallurgical coalmine, green field project

**LOCATION:** Bowen Basin, Queensland

**PROFILE OF ENGAGEMENT:** Establishment of all on-site communications infrastructure and network equipment to support the business operation requirements at a major mine. The project was established as the mine was undertaking a major expansion and transition from contracted mining to owner/operated. The implementation needed to occur in a timely manner to meet both the business targets and the broader corporate governance requirements.

**SOLUTION:**

RCST’s design engineers reviewed the requirements and provided a complete integrated solution that included a number of new radio site locations, a licenced backbone radio network, a P25 digital radio system, an industrial wireless mesh network and high capacity redundant wide area network connections. This costed proposal was reviewed and accepted by the customer.

The proposal was then project managed and delivered by RCST on time and under budget. The project included the construction of new radio locations including towers, the establishment of licenced radio links, the establishment of a multi repeater P25 Motorola digital radio system, and the establishment of a Cisco Mesh network. RCST have implemented support processes under
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the ITIL framework with the site and all associated support organisations to deliver additional resilience to the critical infrastructure. The networks are monitored and managed 24 x 7 with a proactive maintenance and performance-reporting regime.

MULTI-VENDOR ENVIRONMENT:

The networks are integrated providing connection to mobile and fixed equipment for applications such as Fleet Management, Fuel Management and Positional Mining Applications (such as the Cat® Terrain System). The establishment of an integrated network with an overarching support structure has allowed the reduction of duplicated infrastructure and an enhanced availability of the required business applications.

BUSINESS OUTCOMES: The establishment of an integrated on site network has minimised costs for the client. The establishment of an overarching support process that includes multiple suppliers has also resulted in a more reliable operational platform for business applications. The integrated network also allows the rapid deployment of new applications.
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**INDUSTRY:** Open-cut metallurgical coalmine, high-capacity redundant wide area network

**LOCATION:** Multiple Bowen Basin mine sites and Brisbane, Queensland

**PROFILE OF ENGAGEMENT:** The requirement for a reliable, robust cost effective high bandwidth network capable of supporting mine operations including the progression to mine automation.

**SOLUTION:**

Following detailed requirements analysis, RCS Telecommunications designed a unique and highly advanced, fully redundant network. To meet the redundancy objectives the identification and use of non-traditional telecommunications carrier infrastructure in conjunction with that of Telstra became a key component of the solution. The use of multiple telecommunications carriers allowed diverse fibre infrastructure to be provided to most of the regional sites with minimal or no installation costs.

The network design provides dynamic routing, automatic failover, Quality of Service plus transitional and ongoing support. More than 20 sites are serviced by the network, with a nominal 100Mbps of dedicated (CIR) capacity provided to every mine site and port, and advanced traffic management functionality implemented on Cisco hardware. The solution provides an enhanced WAN capability for the miner that not only meets their corporate requirements but also provides the capacity and resilience required for their advanced mining applications including automation. RCST support the network through the provision of monitoring, support, capacity planning and billing management.
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MULTI-VENDOR ENVIRONMENT:

The networks use multiple carriers for the delivery of services. These have been integrated into a highly redundant network by RCST. The RCST support team have integrated with the carrier suppliers to provide a cohesive incident and change management process across the solution.

BUSINESS OUTCOMES:

The establishment of the high capacity resilient network has allowed the customer to progress a number of their key business objectives. Key among these are mine automation and the migration of site infrastructure to centralised data centres. This is providing efficiency improvements and cost benefits.
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**INDUSTRY:** Open-cut metallurgical coalmine, radio upgrade to digital P25 trunking network

**LOCATION:** Bowen Basin, Queensland

**PROFILE OF ENGAGEMENT:** Replacement of ageing analogue radio system in a large metallurgical coal mine in the Bowen Basin with minimum impact on operations and focus on providing improved radio coverage, reliability and security.

**SOLUTION:**

RCS Telecommunications were engaged to complete a detailed engineering design specification for a complete turnkey P25 Digital Trunked radio solution, including all site civil works, infrastructure, network and back-haul link design. Extensive terrain RF modelling and client engagement was required to determine optimal site numbers and locations that would provide a robust solution that would cater for planned mining activities over the next five to ten years. We were subsequently awarded the construction of the proposed solution, which was a fully redundant, enterprise level, nine (9) site Motorola P25 Trunked radio system, with integrated voice logging, two (2) PC based dispatch consoles and GPS location services. The project scope included the supply and installation of five (5) new repeater sites; including communications shelters, communications poles and masts; and upgrading of four (4) existing sites; a completely independent, fully redundant, 300Mbps backhaul link network with standby generators and DC systems at all locations to provide a minimum of three days autonomy.

The additional sites addressed the existing coverage issues that the site was experiencing & the P25 trunking system allows for the deployment of additional sites without the need to reprogram the whole fleet of five hundred subscribers, which is one of the main issues with the previous analogue system. The trunking system also provides more efficient use of RF spectrum, which is a finite resource that was becoming unavailable in the conventional VHF band.

The APCO P25 trunking platform was developed originally in North America for emergency services with the primary requirements being reliability & interoperability. If a repeater fails on
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the P25 trunking system the system allocates the next available repeater so there is no disruption to service for the end users. Safety & production are the primary objectives of mining operations so P25 trunking is the optimal solution.

Being an IP based system additional functionality can be incorporated such as location based services, text messaging etc. It also allows for integration with other systems & remote monitoring & control if required. As the trunking core authorises each subscriber on the system this addressed the system access issue something that cannot be done with analogue or P25 conventional systems. RCST also designed & implemented a custom database to address the complex issue of ID assignment for contractors across multiple P25 systems.

RCST completed the installation of the base infrastructure & the changeover of approximately five hundred subscribers with minimal impact on operations & within the specified timeframe.

MULTI-VENDOR ENVIRONMENT:

Although the P25 Trunked radio system was provided as an integrated solution from Motorola, the project required the supply, integration and installation of components from multiple other vendors, which also included direct management of these vendors and their activities on site.

BUSINESS OUTCOMES:

The client now has a radio system that meets their requirements for reliability and scalability, which allows them to focus on their business without disruption to production, & fulfils obligations with respect to OH&S. They now also have complete control over contractor access to their radio network.
PROFILE OF ENGAGEMENT: Our client had an out-dated analogue two-way radio system that was experiencing unacceptably high levels of failure and poor performance due to coverage issues. The existing system also required manual channel change for mobile communications when navigating through the different geographical areas. This negatively affected productivity.

SOLUTION:

RCS Telecommunications undertook a site survey that highlighted coverage issues resulting from the customer’s site expansion. We undertook the design, equipment supply and installation of the versatile and powerful Motorola MotoTrbo (DMR) system, which provided two-way radio functionality with digital technology across multiple sites. The voice quality, integrated data applications, increased capacity and extended battery performance of the system enabled seamless roaming of the subscribers within the system area.

MULTI-VENDOR ENVIRONMENT:

RCS Telecommunications managed the end-to-end delivery of the system, which included supply, and install of Motorola equipment, required power equipment and site negotiations and access.

BUSINESS OUTCOMES:

The solution delivered significant productivity and safety gains for the customer.
PROFILE OF ENGAGEMENT: As part of council amalgamation high speed, cost effective communications links were required between the main council locations. These locations are based in rugged, cyclone classified areas. The customer undertook a tender process to seek viable and cost effective solutions from suppliers.

SOLUTION:

RCS Telecommunications designed a licenced microwave solution utilising existing tower infrastructure that could be accessed in the region to manage costs. The radio links included one 50 km link with 50% of it over water. The solution was accepted by the council and RCST was the successful tenderer. We assisted in the negotiation of the required access agreements, supplied, installed and commissioned the radio links. The project was completed on time and on budget.

RCS Telecommunications established availability and performance monitoring and reporting on the links. The links are still under RCST management and have performed well for a number of years with availability above 99.9%.

MULTI-VENDOR ENVIRONMENT:

RCS Telecommunications managed the end-to-end delivery of the system, which included supply, and install of Ceragon microwave equipment, Cisco equipment, required power equipment and site negotiations and access.

BUSINESS OUTCOMES:

The solution delivered significant productivity improvements for the customer.
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WE CONNECT THE UNCONNECTED
WITH VOICE, DATA, PHONE & VIDEO

We specialise in meeting the communications and networking needs of regional & remote communication networks.

- **Digital Radio Systems** (TETRA, P25, DMR)
- **Analogue Radio Systems** (Private, Public, CB)
- **Data Systems** (BAN, LAN, WAN, PCN, Security)
- **Vehicle, Personnel & Asset Tracking** (Satellite, GSM)
- **Managed Services & remote monitoring, 24/7**
- **Rapid response & Scheduled Maintenance**
- **SCADA & Telemetry**
- **Communications Infrastructure**
- **Fleet Maintenance**

Our service philosophy centres on collaboration, specialisation, expertise, quality & innovation for authentic business partnerships.