

Like most industries, the electricity industry is continually challenged to improve delivery (quantity, availability, reliability and price) and efficiency (time and resources). ElectraNet's operational telecommunications network is critical to achieving these business goals. As a consequence this network must continually evolve and grow, with an ongoing focus on network efficiency, availability and asset management.

The relationship between CommTel and ElectraNet began over 15 years ago, starting with CommTel supplying access and backhaul products. Over time, this extended to deploying end-to-end network solutions including Operational Support Systems. As a result, there has been a significant increase in professional services provided by CommTel, such as business analysis, detailed design, system configuration, integration and training.

## ElectraNet's Requirements – Industry Knowledge, Keeping Ahead of the Game and a Partnering Ethos

Teleprotection is essential to maintaining a reliable and safe electrical grid, and a similarly robust communications network is fundamental to this. Wanting to utilize best-of-breed products, ElectraNet has a small number of select relationships that it uses to source and integrate its multi-platform multi-vendor network.

In selecting its partners, ElectraNet's key requirements were that they must (a) understand telecommunications in the electricity industry, (b) continually expand their competences, service capabilities and solution offerings to keep ahead of the game, and (c) have a true partnering ethos and working style.

Over the years, CommTel has continued to demonstrate its credentials across all three requirements, leading to a deep and effective relationship delivering significant business benefit.

## **ElectraNet's Requirements**

- A trusted consultant and solutions provider that understands ElectraNet's business and requirements.
- Complete solutions that encompass equipment, software and services (design, integration, implementation and support) that can adapt and grow over time.
- A consultant and solutions provider that delivers and keeps ahead of the game.

### Solution

 CommTel is ElectraNet's long standing trustedpartner for operational telecommunications

### **Outcome**

- The ElectraNet Telecommunications team can focus on its core business – managing the network
- Continued increased efficiency, availability, reliabilityand effectiveness of ElectraNet's telecommunications, as a contribution to improved electricity transmission.

# Progressing from Equipment Supply to Complete Solutions

The CommTel - ElectraNet journey started with a focus on supplying network equipment such as PDH and SDH multiplexers and microwave radios.

Through the years the relationship has matured and expanded to include an increasing array of progressively more sophisticated Operational Support Systems (OSS) and professional services.

In the early years CommTel supplied OSS for equipment configuration and monitoring, i.e. basic Element Management Systems (EMS) such as Nokia's Q1 Agent and Ericsson's MV36.



The implementation of these systems required little in the way of design, integration and configuration services. Over time, ElectraNet's network has grown in size and sophistication, and consequently the range of OSS provided by CommTel also grew. A few years ago, ElectraNet deployed CommTel's first network management system (CNMS).

As a result, ElectraNet could monitor its network of equipment from nine different manufacturers, with one system. This also saw an expansion in the range of professional services provided by CommTel, to encompass software development and system integration and more advanced system configuration.

In recent years, ElectraNet has engaged CommTel to implement increasingly sophisticated OSS platforms. At the end of its functional life, CNMS was replaced with CommTel's next generation NMS (CNMS-NG).

The expanded capability of CNMS-NG allowed ElectraNet to configure devices from a single NMS in addition to monitoring them, and to display an aggregated network view using information from existing Element Management Systems.

CommTel's deployment and integration of CNMS-NG into ElectraNet's network has resulted in an enhanced view of the entire network, and a reduction of the number of systems required to manage it, deriving the following business benefits:

- Increased availability and reliability

  A consolidated view of the entire network means that issues can be identified and diagnosed more swiftly
- A reduction of the number of systems required to manage the network results in reduced likelihood of human error.

## Cost efficiencies

A reduction in operational effort as a result of the consolidated network view and reduction in the number of systems

An NMS monitors and manages active network elements such as switches, routers, radios, their constituent cards and ports, and the traffic between them. By itself, an NMS does not capture a full network inventory of assets, active and passive, physical and logical. To overcome this CommTel also deployed ConnectMaster for

ElectraNet, an all-in-one service and GIS aware inventory management solution.

ConnectMaster automatically extracts and updates its inventory of active elements from CNMS-NG. CommTel's integration of ConnectMaster and CNMS-NG delivers the following business benefits to ElectraNet:

Increased availability and reliability Ability to rapidly identify the impact of network faults

## Cost efficiencies

- Improved accuracy and efficiency of maintaining network inventory
- Improved efficiency of design and maintenance activities

As CommTel's role has broadened and deepened, particularly in the OSS space, professional services are playing an increasingly important role in delivering business benefits. These professional services include:

- Business and requirements analysis
- Detailed solution design Software development, system integration and configuration
- Tailored training of ElectraNet users and contractors
- Associated business and operational processes

These services cover the entire product lifecycle from concept development and proposal through to go-live and ongoing support. They are supported by thorough processes covering project management; vendor management, change management and service delivery management.

An overarching element to the succ and longevity of the relationship has been CommTel's ethos of working with their customers as if CommTel is part of the customer's organisation. This ethos ensures that CommTel keeps ElectraNet's business objectives at the fore and drives recognition in each project that CommTel's success comes from helping making ElectraNet successful.



### About ElectraNet

ElectraNet is the principal electricity transmission network service provider in South Australia. ElectraNet owns and operates South Australia's high-voltage network for transporting power from generators to the distribution network, and for connecting directly to some industrial customers. Currently, ElectraNet serves the state with more than 5,600km of transmission lines covering a service area of around 200,000km2, and 91 high voltage substations.

### **About Commtel**

CommTel is a leading international provider of advanced and engineered solutions for mission and business critical networks. We are a technology integrator, specialising in the delivery of network solutions that ensure the reliable delivery of vital services such as water, gas, electricity, public transport, and emergency services.

CommTel is widely known for innovative technology solutions, providing the network infrastructure and associated applications that optimise existing networks, as well as delivering digital transformation programs that provide a seamless transition from legacy to new technology.

Businesses in the mining, transport, oil & gas, utilities and emergency services sectors rely on CommTel as their trusted, long-term partner to ensure their systems meet their exacting requirements in the critical areas of safety, reliability, capacity, efficiency, intelligence and security. CommTel is certified to the highest international standards for Security, Health & Safety and Quality, and maintains a strong commitment to the environment.

To find out more about how CommTel can take your business into the future, visit www.commtelns.com



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