



commtel™ case study

a large leap forward

enabling new capabilities whilst managing complexities and risk within a live network

CommTel were awarded the tender to implement the ConnectMaster network records, design and provisioning system – replacing an existing ‘end of life’ application. ConnectMaster and its integration with the workflow system will significantly improve the efficiency of TransGrid’s telecommunications processes, speed of information processing and quality of analysing network faults.

TransGrid is the owner, operator and manager of the NSW high voltage network connecting generators, distributors and major end users in NSW and the ACT. The network is the centre of the National Electricity Market and interconnects with Queensland and Victoria, making interstate energy trading possible.

Associated with the electricity network, TransGrid owns and operates a large telecom network that plays a critical role in protecting, monitoring and managing the electricity network. As such, timely and accurate network inventory and provisioning forms

a crucial part of its day-to-day telecommunications processes and operations. With the existing telecom provisioning and records system reaching end of life, TransGrid went to the market to source a replacement system.

Key amongst its requirements were: (a) increasing the efficiency of maintaining its network inventory, (b) improving the efficiency of its design and maintenance activities; (c) increasing information accuracy and (d) the ability to rapidly identify the impact of network faults - all while significantly reducing the number of systems and

repositories where information is stored.

Some early hurdles included migration of vast amounts of disjointed data contained in the old system and a large number of spreadsheets while integrating ConnectMaster with TransGrid’s Keilor system.

CommTel put forward a compelling complete solution centred on ConnectMaster that incorporated the analysis, configuration, integration, training and ongoing support services that TransGrid required. The close alignment of CommTel’s solution to TransGrid’s requirements and providing the best value for money resulted in CommTel winning this competitive tender.

Inventory and Design

Together, the two companies, with support from Dynamic Design, implemented ConnectMaster, a best-of-breed telecommunications provisioning, records and design system. Powerful, intuitive and user-friendly, ConnectMaster provides an expansive and configurable platform for documenting all aspects of infrastructure based telecommunications networks, giving users an integrated view of their operations both physically and logically.

Objective

- Establishment of future-proof design with record provisioning
- Single system working on physical & logical network layers
- Improvement in network efficiency, design, provisioning & inventory activities
- Reduction in required systems & information repositories

Solution

- ConnectMaster - a full turnkey telecom design, provisioning & record system

Outcome

- Ability to increase design capabilities
- Quick identification of operational impacts caused by network faults
- Improved accuracy & reliability of network data
- Reduction of required data repositories

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Several key steps had to be carefully carried out to bring the project to completion. The initial steps were: the installation of ConnectMaster, the development of the device models, the initial trial migration and further testing of the migration strategy and tools.

As with many system replacements, the data migration presented considerable challenges, such as the sheer quantity of data, the large number of data sources and the dynamic nature of the data as the network continued to expand and change while the migration progressed.

Using a comprehensive data dictionary, sophisticated data validation and integrity checking tools, a considerable amount of data needing correction prior to migration was identified. TransGrid, having the best knowledge of the network, undertook the vital data re-mediation.

In parallel with the data migration, work on integrating ConnectMaster with TransGrid's K2 Workflow system was commenced. Once the migration was completed, end user training was conducted and the system went live.

Training - Tailored to Requirements

An important facet of the project was providing comprehensive training for TransGrid's staff on the administration, functionality and use of ConnectMaster.

CommTel's extensive training experience coupled with having implemented ConnectMaster at TransGrid enabled CommTel to tailor three different specific courses for TransGrid.

One course covered the administration of TransGrid's ConnectMaster implementation; another provided telecom staff with the knowledge and skills to develop and maintain the various network components within ConnectMaster. The third course taught field technicians how to use ConnectMaster to locate and update information on the telecom network.

Automatic Flow Through

Before TransGrid implemented ConnectMaster, network inventory and configuration information was stored in an MS Access database, multiple element management systems and a large number of spreadsheets.

ConnectMaster has seen TransGrid make a massive step towards a "Single Source of Truth" for network inventory and configuration data. By replacing the 'end of life' MS Access database and the vast majority of the spreadsheets TransGrid has dramatically improved the accuracy and currency of the data.

By integrating ConnectMaster with their provisioning workflow system TransGrid will benefit from automatic flow through reducing double entry of data, the resultant errors and time lags.

Swift fault assessment

The ConnectMaster system now covers approximately 180 sites, 1,000 equipment racks, 1,000 network elements, and over 3,500 services. The network is comprised of copper, optical fibre, microwave, PDH, SDH and IP technologies, sourced from a wide range of manufacturers.

With the previous Microsoft Access system retired, the ConnectMaster system is now providing TransGrid with the ability to conduct significantly more network design activities, as well as to swiftly determine the operational impacts of network faults using the impact analyser facility. It has also shown a marked improvement in the accuracy and reliability of data – fulfilling another of the TransGrid's primary objectives.

Account and Delivery Management Working in the background were CommTel's Service Delivery and Account Managers who added considerable value through their project oversight roles. In particular these managers assisted in the vital task of keeping TransGrid staff beyond the immediate project team informed on progress and actively helped in addressing any issues that arose from time to time.

"CommTel's experience in managing and performing ConnectMaster projects along with their co-operative synergistic working style and vendor management capability successfully delivered our new telecommunications design and provisioning system. The project has resulted in significant business improvements.

CommTel, throughout this major project, have demonstrated their strong capability and ethos of working with their customers as if they are part of the customer's company" Tony Pinchen, Communications and Control Manager TransGrid.

"CommTel's technical team has been very efficient, responsive and proficient during the whole ConnectMaster project. Their deep product knowledge and understanding meant they were able to solve the majority of technical issues quickly and directly" Utsab Parajuli, Senior Technical Specialist, Engineering, Telecom Design, TransGrid.

About Commtel

CommTel is a leading international provider of advanced and engineered solutions for mission and business critical networks.

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