



## Building The Communications Hub for the Energy Market

One of Australia's state Gas market operators engaged a number of contractors to develop the software to enable the launch of Full Retail Contestability (FRC). FRC would enable gas consumers to choose their retail gas supplier, providing a competitive market, and driving efficiencies throughout the sector. A number of the contractors that undertook this project went on to form the core of Hubco.

The project required the various participants in the gas market to be able to communicate and exchange data seamlessly from the meter readers, to the distributors, the retailers and the industry market operator. The market operator controls the gas flows, the wholesale market for gas, pricing and supply from and to producers and retailers. Importantly the market operator is responsible for ensuring market participants comply with market regulations.

The system required business to business (B2B) transactions to occur, with multiple market entrants servicing the one customer. It also needed to facilitate agreement between the various participants, determine and agree business transactions required and manage the schedule.

It was critical that the project was a success and the time frame was not negotiable. The project was unique to the state market in which it was implemented and there was no room for error. Project success was critical to the industry.

The solution included using the aseXML standard (A Standard for Energy transactions in XML), already in use within the electricity market and to expand it to cater for gas requirements. It was necessary to determine the protocols and communications required for the various parties and required the use of secure messaging with digital signatures for message authentication. We chose to use ebXML, the most suitable commercially supported protocol, and wrapped the proprietary standard within the Transport, Routing and Packaging components of the commercial standard.

We delivered the communications hub, technical specifications and documentation, protocols, adaptation of gas protocols and standards and determined the requirements for the various environments. We also developed the environments, including testing, development, production and recovery, test certification gateways and responders to conduct market testing and approval for participants.

The team of people provided had the necessary skills for the project to succeed. They were given the authority to drive the project and resolve problems as they came up, providing partnership with customer stakeholders and key decision makers.

The FRC Hub project was a huge success, delivering a single point of communications for the controlling body, resulting in a far simpler solution than point to point communications between the numerous market participants. This enabled easier and more cost effective maintenance and lower overheads for both the market operator and the market participants. It has also provided reliable and non-repudiable delivery of messages from Day 1. This cuts down on the number of disputes in the market, which is an expensive process in other comparable markets. The project was delivered ahead of schedule and well below budget.



The FRC Hub continues to be the central point of communication for all participants in the state market, and a number of other state markets have also joined the system. It reliably delivers 120,000 messages per day on average, and has enjoyed an uptime of 99.9% over the last 12 months. In addition, the Testing and Certification systems that were conceived, designed and developed by the project team provide new entrants to the market with the ability to fully test and certify their systems and processes prior to entering the production market. This ensures them, and existing participants, of a smooth and safe entry into the market.

Hubco continue to maintain and develop the FRC Hub under contract with the relevant market management company. Because of their experience, the Hubco practitioners managing the Hub have also been involved in additional FRC projects, providing guidance and technical expertise. Participants that were involved in the initial FRC project have requested that the same documentation, processes and systems be put in place for new projects. This has provided further confirmation of the success of the original project, and the capability of the Hubco people involved.

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