



## **e&e Solutions Case Study**

### **Engagement Overview**

As part of an oil and gas client's US\$18.5 billion project, e&e were engaged in a program of work that extracted and converted coal seam natural gas to liquefied natural gas for export to the global market.

This engagement involved the review of communications connectivity across the gas fields. This included over 700 remote well pads. 'Out of the box' thinking was required to look at the current gas well connectivity network, which was based on Fibre technology, and look at other technologies that could potentially provide greater agility and reduce costs without compromising existing service levels and availability.

### **Scope of work**

This initial scope of this engagement was to collaborate with the Brisbane-based Information Services team to look at the existing gas field connectivity network 'as is' and explore innovative and emerging technologies that could potentially provide a much better service without compromising existing availability or safety.

A business case was produced which outlined several alternative options/scenarios (including business as usual) and a recommendation to trial LTE (4G) technology across selected wells. This involved piloting a new service offering, which was being developed at Telstra. This project involved transitioning well telemetry and control communications from fibre to LTE (4G) to provide expected savings of 50% over equivalent fibre total cost of ownership. This project involved delivering WiFi at the well pad, improved field 3G coverage and provision to improve P.25 digital trunked radio coverage, which will allow future access to emergency radio services.

### **Outcome**

In late April, 2015 the client signed a landmark deal with Telstra that set a new direction for gas field telecommunications.

Two years in the making, this deal will see Telstra support modems on the client's well pads to enable wireless communications, removing the need to install thousands of kilometres of fibre optic cable and associated equipment to each site.

This solution delivered agility and flexibility for the client's business – and ensures that the connectivity infrastructure is future-proofed to support change and new development.

In addition to the above-mentioned benefits, this outcome will also deliver significant cost savings for the business. The benefits will also provide provision to expand the radio communications network for emergency services across the region. As a result of e&e's thoughtful leadership additional concepts came out of the initial brainstorming sessions and was factored in as part of the infrastructure design.