

For gas pipeline operator Jemena, communications means more than just relaying information. It's about keeping teams connected.



n managing a network of 23,000 kilometres of gas pipeline in New South Wales, fast and accurate communications are crucial to Jemena's control room, to ensure emergency communications as well as routine, daily information exchanges with those in the field are effective.

Jemena owns and operates a diverse portfolio of energy assets in Australia with more than \$10.5 billion worth of major utility infrastructure, and supplies millions of households and businesses with essential services every day.

In New South Wales, the company distributes natural gas to 1.3 million customers in Sydney, Newcastle, the Central Coast, Wollongong and rural areas.

Sue Jackman, General Manager, Networks Operations and Control, said the safety of field resources is the key factor in the organisation's commitment to providing accurate and reliable communications systems.

"We learned a lot about communications during the Blue Mountains bushfires in NSW in 2013," she said.

"With mobile towers down and no GPS, the only devices working were radio. Fortunately, our radio system not only enabled our field crews to communicate with each other, the system also enabled the control room to locate and track the whereabouts of our people on the ground.

"Similarly, geofencing allowed us to automatically ensure our people were at muster points when required. During the several

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days of this emergency we could account for every employee for every minute they were working," she added.

"From that point on, we knew communication across the whole Jemena network had to be about more than just relaying information. We knew it also had to be about using technology to keep our teams connected."

Today, Jemena equips its gas distribution field resources with the latest wireless communications radio technology, using

Motorola 4000e-series devices with wide-area group voice communications, GPS, Wi-Fi and BLE features to meet the day-to-day field operations within the business.

The technology solution was supplied by Mastercom using the Motorola-powered Orion Network — the largest IP-connected radio network in Australia.

The Orion Network provides connectivity between Jemena's first responders and its control room in Sydney to manage field service activities for maintenance, servicing and emergency response. The solution provides control room communications services - via TRBOnet console and dispatch software — including GPS location, to determine the current status of Jemena first responders.

The application layer has enabled incident planners in the control room to make informed operational and business decisions to improve resource management, reduce first responder travel time and meet the regulatory response time commitments.

"We have worked over many years as Jemena technology and service partners to meet the evolving critical business communications needs of Jemena for both voice and data services across the gas distribution network," said Hamish Duff, Managing Director of Mastercom and Director and founder of the Orion Network.

The Mastercom solution has also provided a strategic improvement in the systems report modelling. Not only has the managed service enabled the control room to locate, allocate and communicate with resources, it has also helped streamline the process itself. Job dispatch times are now less than three minutes from the time of initial call and on-site response times have improved to be now under 30 minutes from the time of the initial call to arrival on-site. (The NSW regulator standard is 60 minutes)

"Technology is evolving all the time and it is important that Jemena, and the industry, keep up to date with the latest updates and features. Therefore, we need to ensure that our communications systems are reliable, robust and user friendly," said Jackman.

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