

## Challenges

- To provide a reliable and quality solution to AxURE Technologies® S.A in the eastern oil fields of Colombia;
- To migrate all existing customers from its existing satellite solution;
- The solution needed to be implemented in the harsh environment and isolated areas of Colombia.

## Solution

- InfiLink 2x2 units with integrated 23dBi antenna;
- InfiLink 2x2 units with higher gain external antenna;
- Dozens of subscriber terminals from the InfiMan 2x2 family with a mix of 19, 23 and 28 dBi integrated antennas;
- Multiple base stations with 16 dBi @ 90° integrated antennas, covering distances up to 15Km each.

## InfiNet Wireless offers a cost-effective solution and improves connectivity for AxURE Technology's network across oil fields in Colombia

Colombia, situated in the northwest of South America, is the fourth largest economy in Latin America. The geography of this country is characterised by its six main natural regions that present their own unique characteristics, from the wet climate of the Amazon Rainforest, to the high altitudes of the Andes Mountain range.

Colombia is home to more than 48 million people and covers approximately 440,831 square miles of South America. It is also one of the biggest exporters of crude oil to the American markets.



AxURE Technologies® S.A., a Colombian company, provides essential telecommunications solutions and services to more than 85% of the petroleum industry in eastern Colombia. Established in 2001 and with more than 150 employees – and growing – AxURE Technologies has quickly become a key player in the provision of various technology-related services to the oil industry sector.

Royal Telecom is InfiNet Wireless' partner in Colombia and was established in 1999. It has played a major role in the Colombian telecommunications marketplace for many years today, having set up a presence on a nationwide scale. The company specialises in the wholesale distribution of communications and security solutions and offers first class services from globally recognised brands.

In recent years – especially since 2013 – the global oil industry took a hard knock when oil prices started falling at a drastic rate due to various internal and external drivers, leading all players to seek ways to reduce costs within their infrastructure and generating even more revenue streams from their existing assets. AxURE Technologies, being no exception, had to take a deep look into ways to reduce its own cost base and save money for both itself and its end customers. The majority of its services were previously delivered via a satellite-based network, something which was proving costly and not easy to scale.

### Benefits

- A stable solution, with increased throughputs and significantly improved latency;
- Reduced operation costs, enabling AxURE Technologies® S.A to provide a much better service and offer new services such as videoconferencing.

AxURE Technologies first considered deploying fibre-optic cables and GPRS solutions, but both were deemed very expensive options and difficult to implement in the harsh landscapes and isolated areas of Colombia, especially across the long distances from their various remote sites. The company specified a solution that had to be both flexible in terms of geographical coverage and one which could be easily scalable in order to cater for future expansions as and when required.

AxURE Technologies approached Royal Telecom, a well-established supplier of fixed wireless solutions, to help them identify, select and deploy a future-proof and reliable wireless platform. Royal Telecom designed a comprehensive wireless network based on the InfiNet Wireless portfolio of solutions and offered a small scale trial infrastructure to demonstrate cost efficiencies. This added value to

AxURE's customers, whilst of course delivering all requirements for connecting every single location – no matter how far it was from AxURE's main management centres – as well as delivering high bandwidth links with very low latency figures over long distances.

The solution that was ultimately deployed consisted of a combination of both InfiLINK 2x2 and the InfiMAN 2x2 product families. It was deployed to three of the largest oil fields companies in Colombia and enabled them to connect their main sites to all their deep-water drilling locations.

This new platform was based on dozens of 19dBi subscriber terminals and multiple InfiLINK 2x2 links fitted with 21 dBi antennas, allowing full access to all the remote exploration facilities and field sensors. It also offered a much greater network stability as compared to the previous satellite-based infrastructure. The easy setup of the network also enabled AxURE to migrate all of its existing customers to the new platform effortlessly and provide them with additional services such as video conferencing.

Royal Telecom worked closely with InfiNet Wireless to plan, design and ultimately implement the first links of the new fixed wireless network using InfiNet's latest wireless technology and provided support to AxURE from the installation phase to ongoing supervision and maintenance of the new platform.

AxURE Technologies now has the best available wireless infrastructure to sustain its exploration facilities, most of which are several kilometres away. The solution provided by InfiNet Wireless, along with the increased bandwidth and reliability, allowed AxURE Technologies to reduce its operational costs and those of its own customers.

*"The technology delivered by InfiNet Wireless and its local partner has been fundamental to our business in terms of improving our own brand, allowing us to access real-time all the different MICU units in the field and ultimately better manage our assets and those of our customers," said Juana Patricia Martínez, SEP & Strategy Manager at AxURE Technologies. "We are very satisfied with the solutions implemented and we plan to grow together with the help of InfiNet Wireless, our key technology partner."*