Altai Super WiFi™

Success Stories

Altai Unwires Liquefied Natural Gas Field in Papua New Guinea

The Papua New Guinea liquefied natural gas (PNG LNG) project is a new gas project being championed by ExxonMobil to realize the potential of three large gas discoveries in the southern and western highlands of the country. The Chiyoda-JGC (CJJV) was awarded the engineering, construction and procurement contract to construct the plant. The construction began in April 2011 and it will progress in a series of development phases with the first LNG deliveries scheduled to begin in 2014.

Many engineers and workers are staying at the site and require high performance internet access for web surfing and communication after work. CJJV needed a rapid solution for its wireless network and it appointed Oceanic Broadband Solutions to build the high speed WiFi network using Altai's Super WiFi Solution.

Owing to the geographical environment of the site, only satellite can be used as backhaul. One A8 Super WiFi Base Station was installed in the center of the dormitory area to provide 360-degree coverage and a few C1 Super WiFi CPE's were installed in different buildings to extend the outdoor WiFi signal and to provide indoor coverage.

The Altai A8 achieved a line-of-sight range of >1km to provide high speed wireless connectivity throughout the dormitories.

The wireless Internet service is subscribed on a pre-paid basis. People staying at the site may obtain a network access pin by buying a pre-paid card. There are over 800 users accessing the network daily.

Problems & Challenges:

- The site is located just north of Port Moresby, the backhaul is provided by a satellite link
- CCJV required long range wireless technologies so as to minimize the number of installation sites for cost saving
- To provide signal coverage over the entire large, high density dormitory area
- High user capacity to cope with heavy usage, particularly for after work hours

Solutions:

- Installed one A8 in the central area of the dormitory site to provide 360-degree coverage
- Altai C1's were installed on each building to extend the outdoor signal to indoor for full coverage
- Complete end-to-end solution including service control, billing and pre-paid card systems