

SOLOMON ISLANDS GETS AN INTERNET BOOST WITH DIALOG



Challenge

Comprised of six main islands and clusters of more than 900 smaller islands, the Solomon Islands lie northeast of Australia, in Oceania. Teleport and Internet Service Provider (ISP), SATSOL, is one of three ISPs operating out of its owned and operated teleport on the main island Guadalcanal, overlooking the capital city of Honiara. SATSOL provides approximately 20 percent of the country's Internet bandwidth and has built the largest wireless ISP (WISP) network in the country.

The geographical nature of the Solomon Islands can present challenges in the provision of Internet connectivity as terrestrial technologies cannot reach remote islands and are cost-prohibitive to install. The government has acknowledged the need to improve Internet and overall ICT provision to the population of the Islands. Its National Development Strategy, which covers a twenty-year period from 2016 to 2035, places great emphasis on the ways in which Internet access can contribute to socio-economic development.

Solution

With the backing of its local government in a concerted effort to improve Internet and ICT provision for the islands in its National Development Strategy over a twenty-year period, SATSOL selected the Dialog platform to expand its coverage of remote sites as it needed.

Dialog utilizes Mx-DMA return technology which incorporates the best features of MF-TDMA and SCPC technologies and, at the same time, solves the difficult decision of selecting one or the other. Mx-DMA automatically adjusts the frequency plan, symbol rate, modulation, coding and power in real-time for every terminal in the satellite network according to the bandwidth demands and varying link conditions, such as rain fade.

The Dialog platform, supplied by ST Engineering iDirect's partner, Lumina Broadcast Systems, is delivering IP connectivity for the Solomon Islands government, with a single hop service from remote islands to the capital, Honiara. SATSOL initially rolled out remote terminals in ten provincial locations with further expansion plan soon. The education system will also benefit as the improved provincial network will be extended to secondary schools.

Result

SATSOL is a locally owned company and fully recognizes the importance of staying connected to the rest of the world and the impact that this can have on quality of life and the economy. The installation of Dialog has enabled SATSOL to replace a double hop link with just a single hop. Newtec's Mx-DMA® technology has offers a means to optimize bandwidth usage and to transform the overall user experience in a cost-effective way.

As SATSOL looks to increase Internet penetration across the country, the Dialog platform can ensure efficient use of bandwidth, cost-effectiveness and scalability, so that the number of remote sites can expand as required thus enabling the government to meet its development goals.

