



## Wyong Shire Case Study

### **About Wyong Shire:**

Wyong Shire is located in the NSW Central Coast about 100 kilometres north of Sydney and covers an area of 820.42 square kilometres. The shire extends from near Gwandalan in the north to Ourimbah in the south and from the Pacific Ocean to the hills behind Yarramalong Valley.

The shire has common borders with local government areas of Lake Macquarie City Council to the north and Gosford City Council to the south.

### **The Objective:**

Wyong Shire were aiming to increase their data network performance from two of their Depots, one at Charmhaven and the other at Long Jetty 30 kilometres away, back to their Council Chambers. This was a necessary upgrade to cater for Data Traffic and later IP Telephony services. For this reason they undertook a line of sight analysis to determine the feasibility of using the wireless medium for interconnecting these locations.



### **The Solution:**

In January 2004, Wyong Shire issued a tender to connect Charmhaven and Long Jetty Depots to Council Chambers using high speed microwave links.

Wave1 Pty Ltd won the contract to install two 122Mbps licensed microwave systems to link the Council Chambers to the two Depots. As there was no line of sight between the

Council Chambers and Long Jetty Depot a Communication Tower at Scadden Ridge was used as a repeater site.

Both of the microwave links operate in the 18GHz licensed spectrum at 100Mbps full duplex for data, plus the option of up to eight E1 side channels for voice/video applications.

Since installation and commissioning the wireless microwave systems, Wave1 have been providing On-Site support and service to Wyong Shire.

Wyong Shire's Microwave WAN appears as follows:

