



**SAF Australia** is the official national representative of the European microwave radio manufacturer **SAF Tehnika**. Based in Salamander Bay, NSW and Brisbane, QLD, **SAF Australia** together with our regional distributors supply SAF microwave radio systems as well as a full package of services to customers across the country. SAF microwave radios provide wireless data and voice transmission solutions to major fixed and mobile operators, ISPs, councils, utilities companies, schools/universities and many other customers in nearly 100 countries worldwide, including Australia.



Ballina, NSW, AUSTRALIA

# High Speed Microwave Radio WAN for Ballina Shire Council, NSW

*"I'm very happy with the throughput - we're getting an average of 250Mbps between a PC at the Council Admin building and a PC in the operations office at the airport - that means very happy staff. The improvement is tenfold (old link struggled along at 24Mbps)."*

Stewart Littleford,  
Manager- Information Services,  
Ballina Shire Council

## DRIVERS AND REQUIREMENTS

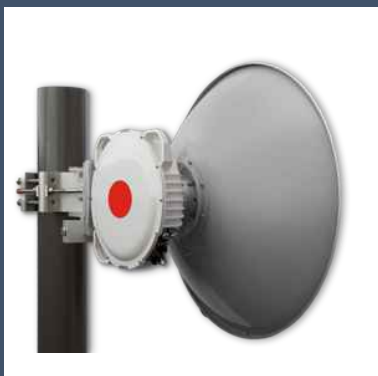
Data speed requirements of Ballina Shire Council had outgrown the limitations of their existing wide area network, adversely affecting daily work operations for Council staff, and creating the main driver for an upgrade.

Specific requirements were:

- Minimum 100Mbps full-duplex data speed between all sites, higher throughput preferred
- High availability
- A full turnkey solution, including network design, installation and ongoing support and maintenance



Ballina Shire Council Network Map



CFIP Lumina- SAF High-Speed  
366Mbps Full Duplex  
Full Outdoor Microwave Radio

## Is YOUR WAN Fast and Reliable?

Upgrade to licensed  
microwave radios for:

- Fast Data Speeds
- Interference-free Operation
- Carrier-Grade Reliability
- Local Support & Spares



**Microwave Radios &  
Local Support  
You Can Depend On**

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## EQUIPMENT

Based on Ballina Shire Council's specific requirements and after performing a site survey, SAF Australia's solution was to utilize SAF CFIP Lumina 18GHz 366Mbps full-duplex radios, due to the following recognised key benefits for the council:

- Very high throughput - up to 366Mbps full-duplex
- 99.99999% or better availability for all three hops
- Licensed 18GHz band for interference-free operation
- Full outdoor solution which saved the Council the additional expense of purchasing equipment racks

## SERVICES

SAF Australia also provided/provides the following support services to Ballina Shire Council:

- Network design and frequency spectrum allocation
- Network installation (carried out by Northern Communications)
- Ongoing preventative maintenance and full technical support, including:
  - *Dedicated spares available overnight from SAF Australia warehouse*
  - *Telephone technical support 7 days a week 6am to 6pm*
  - *Annual network preventative maintenance inspections*

## RESULT

Ballina Shire Council staff can now experience the benefits of data transfer rates 10 times faster than they did prior to the SAF Australia upgrade, facilitating efficiencies, higher productivity and improved operational business performance.



Repeater Site with Three SAF CFIP Lumina Radios