

Microwave

Radio systems with multiple nodes and other communication nodes such as PABX, dispatch centres and integrated applications require connectivity.

In many systems designed today, IP is used as the standard interface allowing a variety of bearer mediums to be employed.

For non-mission/safety critical systems, a public carrier based bearer such as a dedicated IP link or a mobile phone based (e.g. GPRS) bearer can be used.

For more critical systems, a dedicated, privately owned bearer is required. This can be provided by microwave links, unlicensed WiMax, copper or fibre based systems.

AA Radio has extensive experience in the selection, design, supply and implementation of bearers of all descriptions.

High Volume Privately owned Bearers

Microwave and Fibre based solutions are often the first choice for systems that not only cater for a radio communications network but also business communications such as PBX, IT and SCADA systems. We can provide cost effective systems rated from partial E1 through to STM bearers using both radio and fibre.

Where un-used copper cable is available between sites, AA Radio can provide copper based bearer networks using similar technology to the ADSL bearers employed by most carriers to provide connectivity up to 100Mb/s on an IP based network or E1 and more for a circuit switched network.

For short haul bearers, AA Radio have access to many products to suit all budgets and requirements using licensed and unlicensed Wi-Fi and WiMax technologies.

Low volume privately owned requirements.

Where only simple and "skinny" links are required to connect analogue base stations together, often a conventional UHF or VHF link is all that is required. These links are ideal for connecting analogue networks over extended distances (up to 100Km) and are relatively easy to engineer and install.

Non-critical bearers

For less important connectivity used in either redundant configurations or with less consequences in the event of failure, we often use either a public carrier based link or for short haul links an unlicensed IP link using Wi-Fi technology.

Satellite based solutions can also be provided by AA Radio, providing connectivity to remote sites where a dedicated bearer is just not practical. We can provide satellite-based bearers catering for complete office communications at site to very narrow and cost effective dedicated or shared (contended) links using BGAN, Iridium, IMMARSAT and VSAT.

