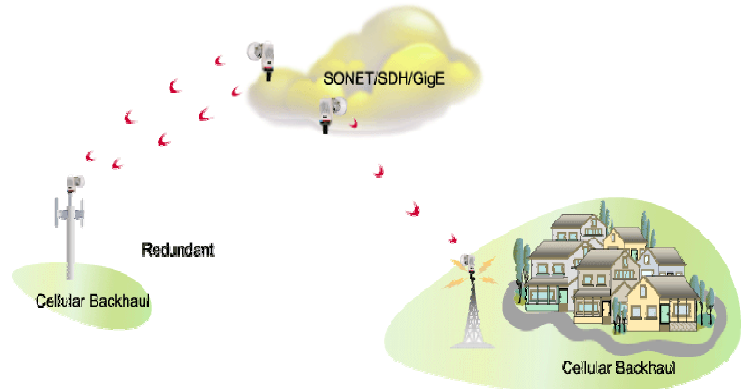# Cellular Backhaul

The success of the mobile market has forced operators to innovate aggressively to maintain market share and improve profitability. With traditional timed voice services experiencing competitive pricing pressures, new differentiated product offerings are exploiting the data capabilities of the deployed mobile networks. These new service offerings translate into an additional backhaul burden on the feeder network into each of the base stations in many cases overwhelming the current network architecture.

AirPair used in conjunction with the APX, a 4 port T1/E1 over Ethernet mux, delivers an ideal solution not only increasing TDM network capacity to the base station but presenting a high speed native IP bandwidth capacity to leverage high value packet based service offerings. For trunking applications an AirPair solution has sufficient capacity to transport more than 48 T1/E1s over a single link. Additionally, using the AirPair Flex functionality, a low capacity solution, such as 10 Mbps offering can be installed day one, and then later be remotely upgraded via software in 10 Mbps increments up to 200 Mbps. This provides a cost effective platform to scale CAPEX with revenue, without sacrificing future service potential.

Packaged in a complete ODU solution, no additional equipment shelter space is required, significantly simplifying the site coordination and rack space issues commonly associated with a typical base station site. System power is provided via a standard 48V battery feed leveraging the protected power system potentially already present, for locations where sufficient capacity is not available a 110/240V AC power supply is provided within our standard packaged offering.

With mobile networks competing in the residential space, network availability requirements has emerged as a key requirement. We have developed a mesh based architecture that yields a highly robust solution yielding extremely high availability, additional network capacity and delivers the ability to add new cell sites to the network for cell splitting or coverage reasons. This provides 99.999% availability with very little cost premium over unprotected services.

Solutions Features:

- Remote, Simple Scalability using AirPair Flex
- Interference-Free using licensed spectrum
- T1/E1 and Ethernet service support
- All Outdoor deployment option
- 1+1 Redundancy and Mesh options for high availability

Solution Benefits:

- Legacy TDM Support
- Simple migration to Ethernet for 3G deployments
- 99.99% Availability options
- Low Entry Cost

AIRLINX Communications, Inc.
Box 253
Greenville, NH 03048
E-mail: sales@airlinx.com
Tel: (888) 224-6814
Fax: (603) 878-0530