1.1. The FibeAir 1500™ System

The system is composed of an Indoor Unit (IDU), an Outdoor Unit (ODU), a high-performance antenna, and a Management subsystem.

- The Indoor Unit is a compact, 17" wide, 1U-high unit, that may be mounted in both standard ETSI and ANSI racks. The IDU includes the physical line interfaces, a full-function SDH / SONET regenerator, an advanced modem and a central processing unit (CPU).
- The Outdoor Unit (ODU) consists of the RF circuitry, enclosed in a compact weather-proof enclosure, adjacent to the antenna. The ODU connects to the IDU via a single coaxial cable of up to 300m (1000 ft).
- The antenna is a 1' (30cm) or 2' (60cm) high-performance antenna.
- The system is managed either locally or remotely by Giganet's SNMP-based software, running on either Windows™ or UNIX™ platforms.
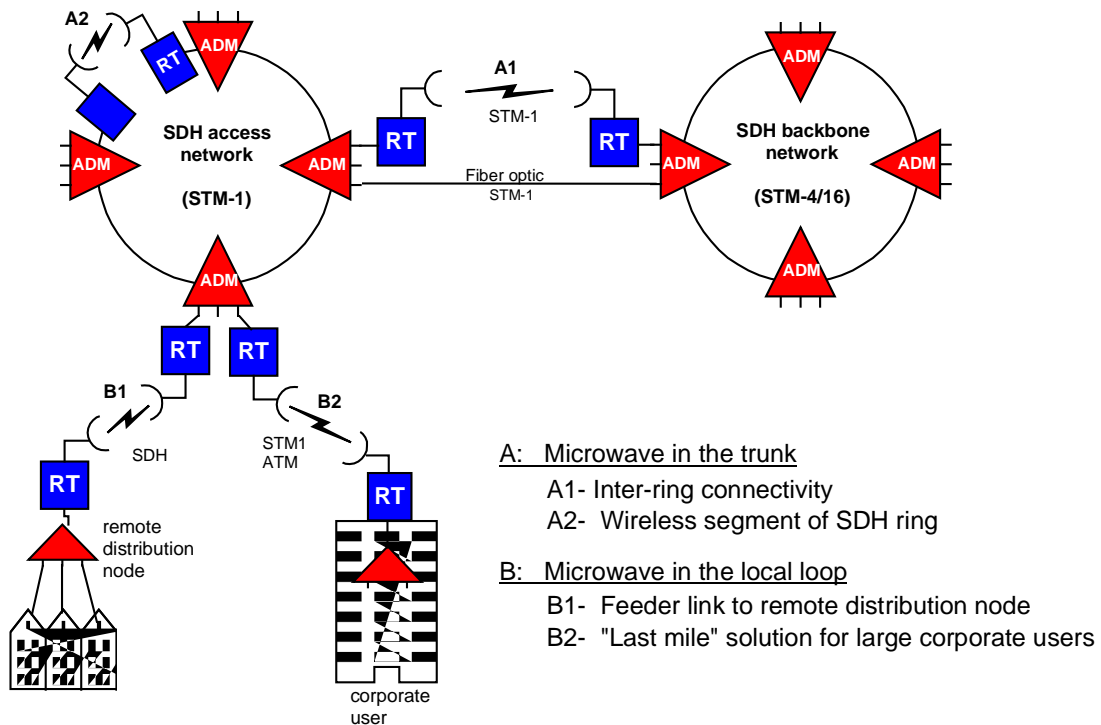
1.2. Applications

Applications include:
- SDH / SONET.
- ATM.
- Cellular networks.
- Corporate / campus networks.

- LMDS backhaul.

1.2.1. SDH / SONET Applications

A: Microwave in the trunk
   A1- Inter-ring connectivity
   A2- Wireless segment of SDH ring

B: Microwave in the local loop
   B1- Feeder link to remote distribution node
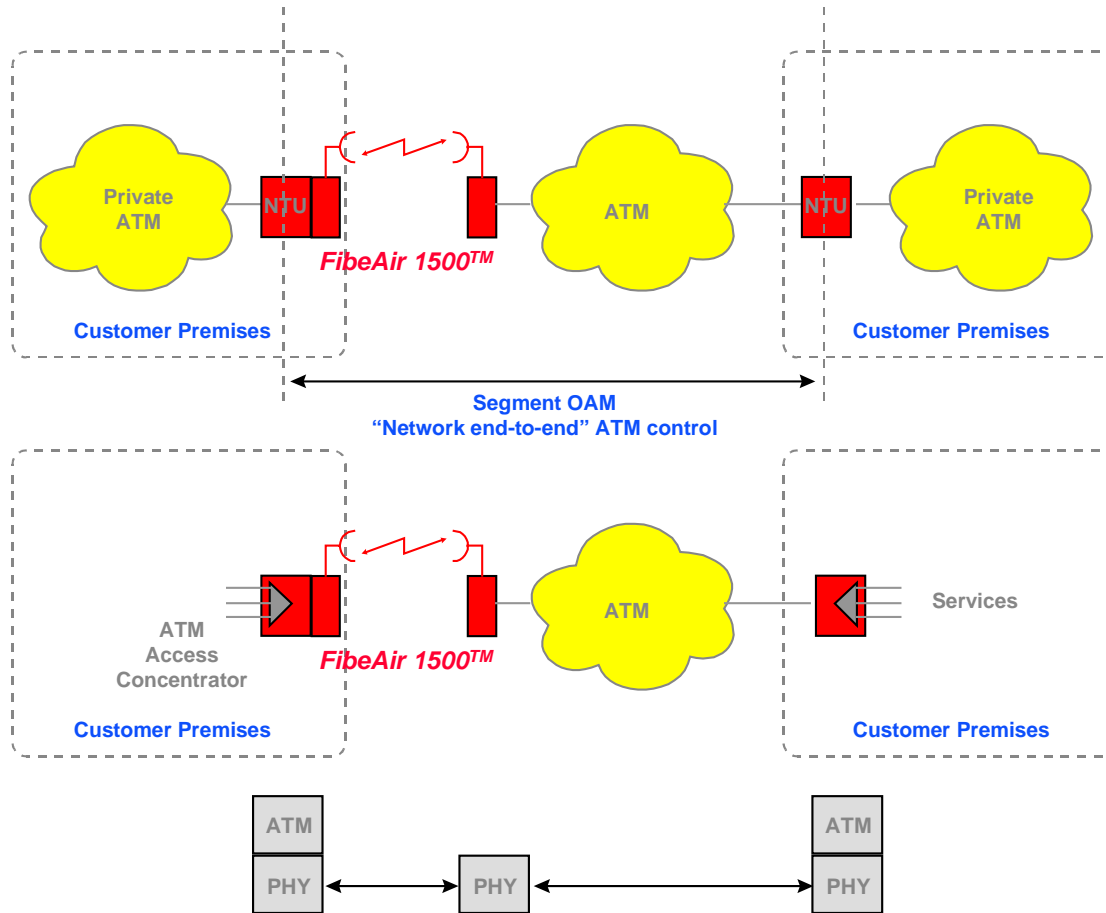   B2- "Last mile" solution for large corporate users

The FibeAir 1500™ is a natural choice for metropolitan SDH / SONET networks. The system may be used for ring closures, ring interconnects and access to remote distribution nodes, and may be used either as a *transparent* alternative to fibers, or as a redundant link providing *media diversity* protection.
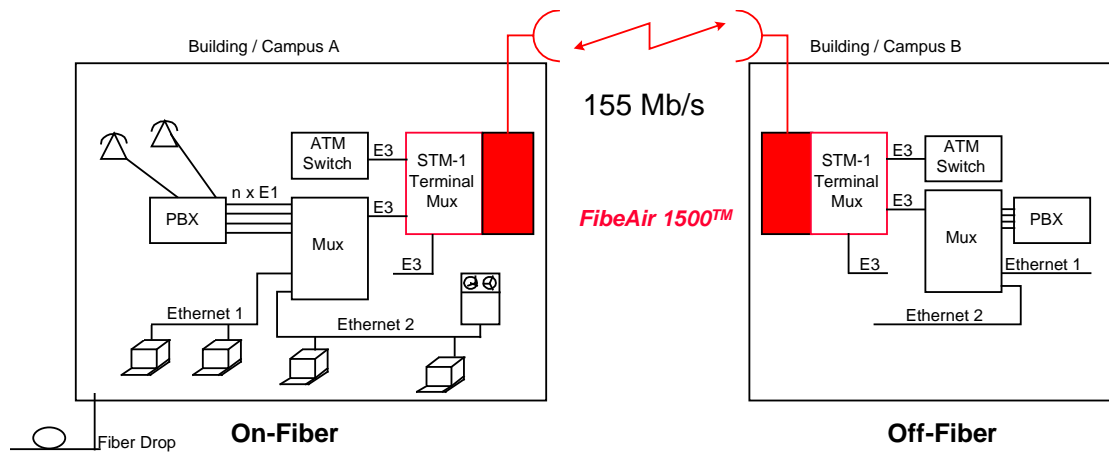
1.2.2. ATM Applications

The FibeAir 1500™ system is optimized by design for ATM transmission.

ATM physical transport: The FibeAir 1500™ provides a *direct* interface for 155 Mb/s ATM physical transport, with support for UTP, STP, CMI (electrical) and various optical interfaces. Combined with an ARC (ATM Rate Converter), the system provides a simple solution for physical transport of T3 and E3 ATM payloads.

Integrated with an ATM NTU (Network Termination Unit) and ATM Access Concentrators, the system provides a combined wireless ATM solution: for interconnecting private ATM networks, or for supporting various services (CBR, VBR and ATM UNI) in the customer's premises.

Building / Campus A

ATM Switch — E3 — STM-1 Terminal Mux

n x E1

PBX

E3

Mux

E3

Ethernet 1

Ethernet 2

155 Mb/s

FibeAir 1500™

Building / Campus B

STM-1 Terminal Mux — E3 — ATM Switch

E3

Mux

PBX

E3

Ethernet 1

Ethernet 2

Fiber Drop

On-Fiber

Off-Fiber

The FibeAir 1500™ system provides a flexible, cost-effective, transport solution for integrated ATM with non-ATM services.