

EXHIBIT 1
Attachment to Item No. 5
Application for Experimental License
Adaptive Broadband Corporation

Location of Testing

Adaptive Broadband Corporation has operations at several locations in the United States: Victor, NY; North Billerica, MA; Sunnyvale, CA; Dallas, TX; and Kansas City, MO. Our expectation is that the majority of testing will occur within an 10 kilometer radius of these locations. All equipment is of the fixed type.

An important minority of testing will take place at so-called "beta sites" located at various locations within the Continental United States. These sites are provided by current and potential customers as a way for Adaptive Broadband Corporation to evaluate the suitability of our developmental radios in actual field installations. The beta sites also provide valuable field experience in a variety of physical and electrical environments, and with a variety of propagation conditions.

Although beta sites are not, in general, owned by Adaptive Broadband Corporation, the equipment that will be tested under the requested Experimental License at these sites will be owned and controlled by Adaptive Broadband Corporation. No equipment will be offered for sale to customers prior to receiving FCC Type Acceptance for that equipment.

In view of the forgoing, Adaptive Broadband Corporation is requesting that this Experimental License be valid for operation at any location within the Continental United States.

EXHIBIT 2
Attachment to Item No. 10
Application for Experimental License
Adaptive Broadband Corporation

Purpose of License and Program of Experimentation

The purpose of this Experimental License will be to test new and improved radio technology being developed for applications both in the USA and overseas. This technology holds the promise of better spectrum utilization and higher data rates in point-to-multipoint and point-to-point applications within the U-NII bands.

While extensive use of laboratory testing and computer simulation indicates that these will be significant contributions to the state of the radio art, it is essential that radios incorporating these techniques be tested in real-world, over-the-air, situations. Our objective is to validate the designs under a variety of real-world installation conditions.

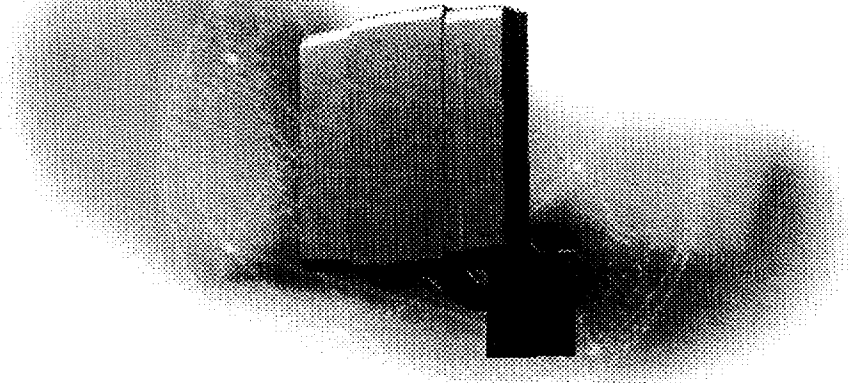
A particular area of experimentation will be with various directional and omnidirectional antenna designs. In using omnidirectional antennas for point-to-multipoint operation, there are issues with performance under multipath situations which need to be investigated in real environments. We hope to improve the state of the art of modulation techniques and equalization through these experiments. In dealing with point-to-point operation, we expect to use higher gain antennas and EIRPs of up to 150 Watts. This will allow longer path lengths which introduce potential timing issues because of the propagation delays. We expect to develop improved techniques for dealing with this situation through the program of experimentation.

Adaptive Broadband is seeking an Experimental License because the radio equipment which will be tested will be either new designs that are not yet FCC Certified (i.e., experimental) or are modifications of the radios already certified which have FCC identifiers OJBAB-ACCESS-AP01 and OJBAB-ACCESS-SU01. The modifications are primarily to permit the use of alternative antennas for experimentation. A data sheet for these radios is attached.

Further details on these radios will be found in our original application for Certification of these radios. The original radios were also tested by Greg Czumak at the FCC Laboratories in Columbia, MD in July 1999.

AB-Access™

U-NII Frequencies: 5.25 to 5.825 GHz



TRANSACTIONAL DATA APPLICATIONS

AB-Access is a broadband fixed wireless access network for Internet, data, video and voice applications. Up to ten times the effective Internet data throughput of other point-to-multipoint systems is achieved by the patented Adaptive Broadband Packet-on-Demand technology.

Telecommunication operators and Internet Service Providers use AB-Access to enhance or replace existing networks, wired or wireless, or to develop new networks. AB-Access operates in various frequency bands, licensed and unlicensed. AB-Access has been designed with the needs of today's and tomorrow's service operators foremost in mind. Rapidly deployable, scalable and economical, AB-Access maximizes use of bandwidth and provides 25 MBPS communication in the U-NII frequencies from 5.25 to 5.825 GHz.

THE AB-ACCESS NETWORK

An AB-Access network consists of:

- Subscriber units at the customer premises, which provide either ATM or Ethernet (10BaseT);
- Cell sites of up to 3 miles (5 km), each providing a standard ATM connection to the wide area carrier network, which enable communication between the subscriber units and the wide area network via a number of sectors, each containing a transceiver, or access point;
- A network manager, to centrally manage the network via a graphical user interface

The network can provide coverage from island sites to complete geographical coverage. The network is structured in a cellular pattern, typically with six sectors per cell site. Each sector is serviced by a transceiver known as an access point, providing a 25 Mbps channel which is shared among up to 254 active subscriber units according to priority rules and limits specified by the service provider. Cell sites and subscriber units are interconnected by either conventional

wired backhaul, or by wireless point-to-point links. Each subscriber unit provides either IP over Ethernet or an ATM interface, via an RJ45 socket installed in the subscriber premises. AB-Access uses ATM 'quality of service' mechanisms to support real-time, high priority video and voice traffic.

MAXIMIZING BANDWIDTH USE

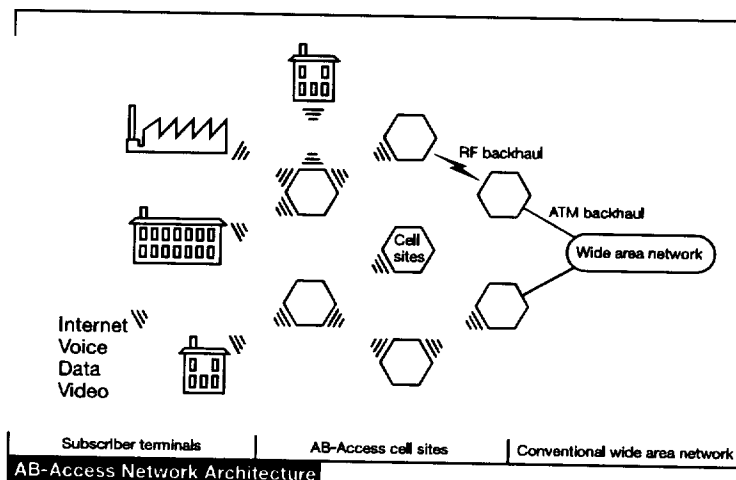
No aspect of the AB-Access bandwidth is committed, allowing dynamic allocation of resources to serve only subscribers with data to transmit, maximizing data throughput and hence enhancing revenues.

Packet-on-Demand: Beyond bandwidth-on-demand, AB-Access allocates bandwidth to users at the granularity of a single cell, rather than in larger 'chunks' which are not used 100 percent of the time. This avoids wasted bandwidth and greatly increases the effective use of the available bandwidth.

Time division duplexing for asymmetric traffic management: Avoiding fixed upstream and downstream channels which are unused for some of the time, AB-Access supports the highly asymmetric traffic patterns which are typical of Internet-type applications, where servers are often located at both sides of the network. The time division duplexing approach means that each data channel is used for both upstream and downstream traffic, dynamically altering direction according to traffic load. This greatly increases the efficiency of spectrum use, as compared to traditional frequency duplexed systems, which allocate fixed partitions of spectrum to upstream and downstream traffic, resulting in unused spectrum.



ADAPTIVE BROADBAND™



ADVANCED SUBSCRIBER MANAGEMENT

Immediate provisioning: New subscribers can be brought on-line immediately, with a single integrated unit which minimizes costs and enables fast and easy installation.

Flexible Tariffing: Subscribers can be billed in a variety of ways, not just by on-air time, but by amount of bandwidth used, time of day, or another appropriate measure.

ECONOMICALLY AND OPERATIONALLY EFFICIENT

Initial infrastructure cost is low... and the network can be incrementally deployed as subscriber numbers grow. The wireless infrastructure means a complete network can be installed in days or weeks, rather than the months or years a wired network requires. Use of the unlicensed U-NII frequencies, 200 MHz of spectrum between 5.25 and 5.825 GHz, means that a network can be deployed without purchasing licenses.

The network is centrally managed by a single application with traffic balanced via handover between cells sectors and interference managed through frequency agility.

SPECIFICATION SUMMARY

Operating Frequency Range 5.25 – 5.825 GHz (middle and upper bands of the U-NII spectrum)

Speed 25 Mbps

INTERFACES

Subscriber unit RJ45 socket offering either ATM 25 (UNI signaling) or 10BaseT Ethernet

Cell site 155 Mbps ATM (wide range of 3rd party alternatives available)

Modulation QPSK

Bit-Error Rate Tunable for range of applications and high level protocols

Subscriber Units per Sector Up to 254 simultaneously active Subscriber Units allowed per sector (overlapping sectors allowed); Each subscriber unit may support an unlimited number of users

ENVIRONMENTAL CHARACTERISTICS

Temperature Range -40 to +55 degrees Celsius ambient temperature

Humidity up to 100% at 45 degrees Celsius

Wind Loading 50 m/second

CELL SITE COMPONENTS

Six access points, each with an integrated 60° by 7° beam width patch antenna

ATM switch multiplexing and demultiplexing traffic from the access points

Unix-based control server to manage the access points

SUBSCRIBER UNIT COMPONENTS

Environmentally sealed roof-top transceiver with integrated 20° by 20° beam width patch antenna

Internal junction box with RJ45 socket and integrated 110 or 220V AC power supply

Web-based installation and configuration application

NETWORK MANAGEMENT

Single central application with GUI, communicating with the cell sites and subscriber units over IP



ADAPTIVE BROADBAND™

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Adaptive Broadband products are manufactured under a quality system certified to ISO 9001. Adaptive Broadband reserves the right to make changes to specifications of products described in this data sheet at any time without notice and without obligation to notify any person of such changes.

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EXHIBIT 3
Attachment to Item No. 14
Application for Experimental License
Adaptive Broadband Corporation

Station Identification

The radio equipment which will be tested under this license are designed for operation in the unlicensed national information infrastructure bands (U-NII) authorized under Part 15E of the FCC Rules. As such, there is no provision for station identification, as none is required under the Rules under which the equipment would operate once they are FCC Certified.

Therefore, Adaptive Broadband Corporation requests that operation under the license be specifically exempted from the requirement for station identification contained in § 5.115, and that the license be so endorsed.

EXHIBIT 4
Attachment to Item No. 15
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Adaptive Broadband Corporation

Antenna Location

In the primary area of experimental operation, at Adaptive Broadband Corporation's plant and surrounding locations, antennas will be mounted on existing buildings, or on existing masts on buildings. The height of the antenna will not exceed 6 meters above the existing structure. In some cases, the antenna may be mounted on existing radio towers. In such cases, the antenna will not exceed the height of the existing tower.

It is likewise expected that antennas at "beta site" locations will be mounted on existing buildings, or on existing masts on buildings. The height of the antenna will not exceed 6 meters above the existing structure. In some cases, the antenna may be mounted on existing radio towers. In such cases, the antenna will not exceed the height of the existing tower.

However, should a situation arise where the antenna needs to be more than 6 meters above a building or existing structure, or exceed the height of an existing radio tower, Adaptive Broadband Corporation will investigate the distance to the nearest aircraft landing area and will coordinate with the FCC District Engineer-in-Charge prior to making such an installation.