

MeshNetworks, Inc.
FCC Form 442
Exhibit 1
File No. 0170-EX-PL-2001

NARRATIVE STATEMENT

By this application, MeshNetworks, Inc., seeks an experimental license in part to replace its Special Temporary Authorization issued under call sign WB9XMV, File No. 0213-EX-ST-2001, which is currently scheduled to expire on December 22, 2001, and in part to expand the scope of its authority to conduct experimental operations. The license will allow MeshNetworks to continue testing new generations of innovative wireless equipment for functionality and customer suitability over the course of the next several years. In support of this application, the following is shown:

(1) Applicant's Name and Address:

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Maitland, FL 32751

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(2) Description and Purpose of Operation:

MeshNetworks is developing a data-centric wireless communication system that provides multimedia services (voice, data, video, and location) to mobile personal Internet devices such as personal digital assistants (PDAs) and laptop computers. Its system achieves this through the use of advanced, patented IP-based peer-to-peer ad hoc networking technology and a high performance wireless modem.

The system will support connection between subscribers within a neighborhood, metropolitan area, or region via a QDMA LAN/WAN and between subscribers via the public switched telephone network, the wired Internet, and other networks. Like cellular systems, it is designed to support mobile users.

(3) Need for a 5-Year License:

MeshNetworks proposes to display, test, and operate prototype wireless equipment so that it may meet competitive challenges, investor expectations, and user needs. It seeks a five-year license to accommodate ongoing tests of equipment that is expected to change or evolve over the next five years as a result of the company's research and development. Thus, the issuance of a five-year license is in the public interest, convenience, and necessity.

(4) Nationwide Locations of Proposed Operation:

The main facility in which radio units will be developed and tested is MeshNetworks' company headquarters, located at 485 North Keller Road, Suite 250, Maitland, Orange County, Florida 32751 (NAD-83 coordinates 28-37-55.5 N, 81-23-57.3 W). Fixed units will be placed on rooftops, billboards, water towers, cell towers, utility poles, and streetlight poles within 40 kilometers of this address. Mobile units will be used by persons in vehicles and by pedestrians and will traverse the area in which coverage is provided by the fixed units.

Although it will conduct tests primarily at the location described above, MeshNetworks also plans to test and demonstrate equipment at other locations in the United States. As it cannot at this time determine the specific locations of such tests, MeshNetworks seeks blanket authority to operate nationwide (within the United States and its territories). Specifically, MeshNetworks seeks authority to operate and demonstrate products (1) at its own premises; (2) at the premises of entities working under MeshNetworks' authorization in the design and development of the devices and related products; (3) at trade shows or non-residential exhibitions; and (4) at non-residential, business, commercial, industrial, scientific, or medical locations during the design, development, and pre-production stages. Indeed, these operations would be consistent with the requirements set forth in Section 2.803 of the Commission's marketing rules. 47 C.F.R. § 2.803

(2000); *see also* Revision of Part 2 of the Commission's Rules Relating to the Marketing and

Authorization of Radio Frequency Devices, ET Docket No. 94-45, Report and Order, released Feb. 12, 1997, at 11-13, 19-20 (“Marketing Rule Revisions”).

In addition, MeshNetworks seeks authority to operate devices at certain residential locations. It submits that grant of such authority is in the public interest and convenience. The nature of the services and devices typically involve such usage and therefore should be tested at residential locations.

None of the units would be marketed to the public under this experimental license. Moreover, MeshNetworks would inform customers participating in the experiments that operation is for experimental purposes only and may be cancelled at any time. In addition, MeshNetworks would label the equipment or user information as follows:

This device has not been authorized as required by the rules of the FCC. This device is not, and may not be, offered for sale or lease, or sold or leased until authorization is obtained.
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(5) Equipment to Be Used:

Many of the consumer products MeshNetworks proposes to test are typically sold in quantities of hundreds of thousands. For example, the potential market for its products include the entities that service over ninety million consumers that currently subscribe to cellular and cellular-like services in the United States. To obtain accurate data regarding real-world operations, MeshNetworks must employ a sufficient number of units during its studies to simulate actual usage. It expects that it will be able to conduct most of its experimentation with a maximum of 50 base stations and 1000 mobiles per test location and that it would conduct such tests at a maximum of 5 sites at any given time.

In order to test scalability, throughput, and loading on its system in a real world environment, however, MeshNetworks also seeks authority to conduct tests using as many as 4,000 units at each site. It will limit the number of units, as well as the power, area of operation, and transmitting times of these units to the minimum necessary to evaluate the system. As required, MeshNetworks would seek separate and specific authority if additional units or other operating capabilities are needed to conduct a particular experiment.

(6) Frequencies Desired:

MeshNetworks' wireless equipment will operate in the 2.4 GHz and 5 GHz band according to Part 15 guidelines.

(7) Radiated Power:

MeshNetworks' wireless equipment will meet the output power guidelines of Part 15 of the Commission's Rules.

(8) Type of Emission:

The emission type is 80M0G7D, in accordance with Section 2.201 of the Commission's Rules. Other emission modes may be utilized, but in no event will the emissions extend beyond the frequency band requested.

(9) Overall Height of Antenna Above Ground:

The antennas will not extend more than 6 meters above the ground or, if mounted on an existing building, will not extend more than 6 meters above the building. If the antennas are mounted on existing structures other than buildings, they will be installed in accordance with FAA and FCC rules and regulations.

(10) Anti-Drug Abuse Certification:

MeshNetworks hereby certifies that it, its officers and directors, and any party with five percent or greater interest in this application is not subject to a denial of Federal benefits requested herein pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. §862.