EXHIBIT No. 1

Frequency Bands

This application for Special Temporary Authorization ("STA") is to test a Local Multi-point Distribution System ("LMDS") that implements two way connectivity. The test system will consist of twelve hub transceivers in each of two locations and up to 36 transceivers located on test customers' premises in each area. These transceivers will be used to interconnect data modems normally used in conjunction with two-way cable television data operation. At least one of the hub transceivers will contain a pilot transmitter to provide synchronization of the internal frequency sources of the customer premises transceivers under test. Transmit frequencies for each path are intended to be dynamically assigned depending upon interference and other factors. Each hub downstream transmitter will be limited to the 24,871-24,997 MHz band. The hub pilot transmitter will be limited to the 24,859-24,862 MHz band, and each customer premises transceiver will use the 25,855-26,005 MHz band. Detailed operating parameters for each transmitter type follows:

Hub Transmitters, Downstream (Quantity 6)

(A) Frequency Range:	24,871-24,997 MHz
(B) Maximum RF Power:	+17 dBm (50 mW)
(C) Maximum ERP:	+31 dBm (2.00 W)
(D) Peak/Mean:	All power levels are MEAN
(E) Emission designator:	6M00D7W
(F) Modulating Signal:	30 Mbps digital data using 64 QAM format
(G) Necessary Bandwidth:	Each transmit channel will occupy 6 MHz of bandwidth based on the normal channelization of the outbound signal from a cable modem. The total frequency bandwidth requested provides channelization for all of the possible cable modem frequencies so that all possible operating parameters may be investigated.

Hub Transmitters, Pilot (Quantity 1)

(A) Frequency Range:	24,859-24,862 MHz
(B) Maximum RF Power:	+17 dBm (50 mW)
(C) Maximum ERP:	+31 dBm (2.00 W)
(D) Peak/Mean:	All power levels are MEAN
(E) Emission designator:	3M00F1N
(F) Modulating Signal:	FM, 24.414 kHz at 1 MHz peak deviation
(G) Necessary Bandwidth:	The pilot transmit channel will occupy 3 MHz of bandwidth.

Customer Premises Transmitters (Quantity 18)

(A) Frequency Range:	25,855-26,005 MHz
(B) Maximum RF Power:	+13 dBm (20 mW)
(C) Maximum ERP:	+48 dBm (100 W)
(D) Peak/Mean:	All power levels are MEAN
(E) Emission designator:	3M20D7W
(F) Modulating Signal:	1.336 Megabits per second using 16 QAM format
(G) Necessary Bandwidth:	Each transmit channel will occupy 3.2 MHz of bandwidth based on the normal channelization of the inbound signal from a cable modem. The total frequency bandwidth requested provides channelization for all of the possible cable modem frequencies so that all possible operating parameters may be investigated.

EXHIBIT No. 2

Location

All hub transmitters and customer premises transmitters will be located on the Motorola campuses in Scottsdale and Tempe, Arizona.

All of the hub transmitters will be located on the 2nd floor roofs of the building complexes at the Motorola campus buildings.

All of the customer premises transmitters will also be distributed on the roofs of the Motorola buildings on the campus described above, or nearby, i.e., within the radius of service indicated.

EXHIBIT No. 3

Antennas

Both the hub and customer premises equipment use directional antennas.

Hub Antennas, Sector Beam

Beam Width (3dB): 90 degrees azimuth (+/- 45 degrees off boresight)
10 degrees elevation (+/-5 degrees off boresight)

All antennas will be oriented so that the boresight is approximately 50 degrees from true north, at an elevation of 0 degrees.

Customer Premises Antennas, Narrow Beam

Beam Width (3 dB): 2.4 degrees (+/- 1.2 degrees off boresight)

Each customer premises transmit antenna will be pointed directly at the hub transceiver site with a 0 degree elevation angle.

EXHIBIT No. 4

Test Program

Test Objective

The objective of this test is to explore the feasibility of providing wideband data connectivity to very large numbers of individual subscribers using wireless interfaces operating in the 25/26 GHz bands. The continued growth in demand for data connectivity, particularly internet connectivity, will soon exceed the current limited capacity of telephone modems. Cable television systems, which already have a large base of connected customers, are successfully beginning to use their capacity to provide data connections at much higher speeds than telephone modems. Telephone companies are also exploring new methods of using their existing wire facilities to provide wideband data service. Wireless systems may provide an answer to the limitations associated with both cable television and telephone wired networks. Indeed, 30 GHz has already been allocated for such wireless systems. The requested STA will allow Motorola to establish a 30 GHz test system to assess the feasibility of wideband data connectivity for large numbers of consumers. As a result of its tests, Motorola expects to determine the appropriate system operating parameters and standards associated with the use of modems and transceivers in the provision of 30 GHz wireless services. This information will be used in the development and production of a variety of equipment that will be marketed commercially as a competing solution for wideband data connectivity overseas.

Equipment Description

The equipment for which this STA is requested will duplicate operational features and protocols used with cable data systems. Cable data modems use well-established operational protocols, which can also be used as the foundation for a wireless system. By treating the IF interface 30 GHz analogously to the cable modem cable interface, a practical emulation of cable system operation can be readily achieved.

The proposed test system will consist of a small wireless network composed of some 36 users at each location linked to each central site or hub. That hub will serve as the equivalent of a cable "headend," which will provide a gateway to the Internet.

The wireless "headend" in the proposed test is Motorola's cable router, configured to provide up to six downstream channels and a maximum of twenty-four upstream channels. Each of the downstream channels is a 30 Mbps channel from the headend to the customer premises equipment. It is time-shared among all of the users assigned to that channel. In the test proposed, 3 users will be assigned to each of six downstream channels. The upstream channels are the reciprocal 30 Mbps links from the customer equipment back to the hub site. These channels are also time-shared among the users.

The headend equipment also sets up and manages the test network. It generates the downstream channel that provides network synchronization and performance parameters associated with the customer premises equipment. Each customer transceiver responds to its headend's specific instructions in the downstream direction regarding channel assignment, transmit timing, and anticipated data volume. In this manner, the headend equipment can dynamically change channel assignments and transmit levels, as well as control data flow to most efficiently manage the network connections.

The interfaces to the headend equipment are 100 baseT to the Internet gateway and cable frequency IF interfaces to the transceiver equipment. The cable interface frequencies are 65-750 MHz for the downstream interface and 6-42 MHz for the upstream. The cable IF interfaces connect directly to the hub transmitters and receivers. Since the downstream channel is common to all hubs, the IF signal from the headend is split into four paths, one for each transmitter, i.e., the headend and the 3 hubs. With each CPE receiver assigned a unique upstream channel, the received IF signals from each remote hub will be combined into a single IF bandwidth in the headend equipment.

Hub transmitters are provided by Telaxis. They provide a fixed upconversion from the downstream cable IF band to the 24,859-24,997 MHz band.

Customer premises transmitters are provided by Telaxis. They provide a fixed upconversion from the upstream cable IF band to the 25,855- 6,005 MHz band.