NORTEL **Wireless Networks**

November 26, 1996

Mr. Carl Huie
Federal Communications Commission
Experimental Radio Service
P. O. Box 358320
Pittsburgh, PA 15251-5320

Via Federal Express

Re: Northern Telecom, Inc.'s Application for Experimental License for MTAs and BTAs for the United States and Its Possessions

Dear Mr. Huie:

Northern Telecom, Inc., hereinafter referred to as "Nortel", has a need for a Nationwide Experimental License to operate at **Various Trial Sites for Broadband PCS MTA and BTA territories. Authority is hereby requested for all designated PCS service territories for the United States and Its Possessions.** Nortel is requesting this Experimental License per the requirements and guidelines set forth in 47 CFR 5.55 and 5.57. Also, please reference Nortel's Nationwide STA currently on file with the FCC under Call Sign KS2XAN, File No. S-2574-EX-96, and which license expires January 23, 1997. It is this STA that we wish to make an Experimental License for the two-year period. Along with this letter is Nortel's Application for Experimental License Form 442 in compliance with FCC Rules.

PCS licensees and potential PCS licensees have a need to test and evaluate PCS equipment in their licensed PCS territories, or territories where they anticipate receiving a PCS license. Nortel is providing equipment to all PCS licensees that are deploying PCS equipment. Therefore, Nortel requests the experimental license to enable equipment testing, evaluation, propagation testing, and demonstration of equipment pending FCC type approval that will facilitate PCS licensees quickly providing service to the general public. The approval of a National Experimental License will eliminate the need for Nortel to request numerous Experimental Licenses and STAs for specific PCS territories.

Nortel will deploy Broadband PCS equipment, propagation test apparatus, and test equipment at numerous sites within designated PCS territories within the United States and Its Possessions. Trial sites will be utilized to operate and evaluate Nortel PCS systems and evaluate propagation characteristics in accordance with the operations defined in Sec. 5.202(a), (d), (f), (g), (i), (j) and (k). The test program will evaluate coverage and equipment performance for providing commercial PCS

Service in the near future. Nortel requests authority to test in **Various Locations in designated PCS service MTA and BTA territories, including PCS territories in the United States and Its Possessions**. Nortel will generally use PCS spectrum licensed to its customers for the tests. The equipment will be operated in accordance with Part 24 of the FCC Rules and Regulations for Broadband PCS equipment, and will not exceed the indicated power and height limitations of Part 24. Spectrum used will be Broadband PCS frequency identified in Sec. 24.229. All sites will be frequency coordinated in accordance with Sec. 24.237 before they are used to transmit radio signal. The testing will comply with other power, height and frequency use rules contained in Sec. 24 of Subpart E-Broadband PCS Rules. Testing will generally be in the Service territory of a licensed PCS operator, with the permission of, and testing for the licensee.

The purpose of the operation will be to perform propagation studies, test and demonstrate PCS equipment performance and deployment within the licensees' territory. The program will assist PCS licensees and future PCS licensees to better deploy equipment and fine tune system details prior to initiating commercial service.

Due to the all-encompassing nature of this Application, testing or demonstrations of technology could use any of hundreds of antennas available for 1900 MHz band PCS systems. These antennae range from -2 dBi to +42 dBi in gain, and from omni-directional to high gain directional patterns with a variety of vertical and horizontal beam-widths. Nortel will utilize extreme care in application of the appropriate antenna for each demonstration, while applying the coordination criteria as set forth in Sec. 24.237 of the Commissions Rules, to ensure that the antennae specified do not cause harmful interference to incumbents in the 1900 MHz frequency band.

Various antenna heights will be used in many test programs at numerous test site locations Nationwide. Antenna height will conform to FCC Rules for PCS antenna heights. Antenna specifications for some of the antennas we know will be used are identified in"Exhibit B" attached.

Nortel also requests authority to test various types, models and quantities of PCS handsets approved for, or designed for, Broadband PCS service as shown in the attached Exhibit "B".

The frequencies used in most test locations will be frequencies licensed to a PCS operator for that territory. All test locations and frequencies used will be coordinated per the requirements set forth in Sec. 24.237 of the Commissions' Rules. Occasionally, testing will be for an auction winner that has not received its license, a future bidder for the territory, or testing in another Broadband PCS frequency (with express permission from the frequency licensee) to avoid microwave facilities.

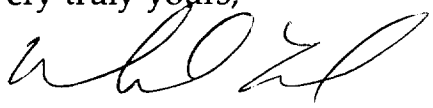
The Type of Emissions will vary. Nortel manufactures Broadband PCS equipment for all systems that have been identified for PCS service to date. The various emission types will include, CDMA, PCS-1900 (GSM based), TDMA, Omnipoint, and CW for propagation characteristics testing.

CDMA:	1M25W7W
PCS 1900 (GSM):	200K0W7W
TDMA:	30K0W7W
Omnipoint:	2M5W7W
CW Testing:	10K0NON

Should you have any questions concerning this Application, please contact me at (972)684-7518 or Elise Mahesh at (972)684-7004. Should you need to reach me by FAX, the number is (972)685-3068. The original of this Application and Fee Processing Form 159 with credit card payment has been sent via Federal Express to the FCC c/o The Mellon Bank, 3 Mellon Bank Center, 27th Floor, Room 153-2713, 525 William Penn Way, Pittsburgh, PA 15259-0001, Attn: Wholesale Lockbox Shift Supervisor, Phone: (412) 234-5494.

Please send the Experimental License in the self-addressed, postage-paid envelope attached hereto to Mr. Raymond L. Strassburger, Director of Government Relations, Telecommunications Policy, Northern Telecom, Inc., 801 Pennsylvania Avenue, N.W., Suite 700, Washington, D.C. 20004, Phone (202)347-4610.

Very truly yours,



Michael Lynch, Manager
Spectrum Regulation
Nortel Wireless Networks
2221 Lakeside Blvd., M/S C0726
Richardson, Texas 75082

cc: Raymond L. Strassburger
Director Government Relations, Nortel

Attachments: FCC Form 442 with Exhibits