STA APPLICATION

File Number: 0261-EX-PL-2005

Full Company Name: **Intel Corporation**

FRN of Company or Contact: **0009362237**

Full Contact Name:	**John Hammond**

Contact Mailing Address:	**2111 NE 25th, JF2-15** **Hillsboro, Oregon 97124**

Event Name	2 year Experimental STA for 802.16e development
STA Start / End Dates : (including setup/test)	2 year grant

Description of Experiment or Research – Which Needs to Include the Following

Specific Objectives to be covered (detailed):
Conduct field tests of 802.16-2004 and 802.16e standards for broad band wireless access in both nomadic and mobile environments. This will involve development of the mac/phy technology as well as protocol technology to handle mobile hand-offs in the next generation WiMAX environment. The evolution of the technology will include Laptop Computers, PDA's, and other wireless communications devices.

Description of equipment (detailed):

Immediate equipment will be based on Nextnet Wireless Base Station and Subscriber Station products for the 2.5GHz band. A total of four (4) sectors of either 90 or 120 degrees each will comprise of the base station with a maximum of 20 'mobile' devices connected at any one time. Equipment will be based on Intel 5116 and the next generation silicon products

Base Station: Nextnet Wireless **BTS-2500A TDD**
Subscriber Station: **2510A/3310A/3510A/Intel based silicon**
http://www.nextnetwireless.com/assets/news/Media/PDF/BTS_2300A-2500A-3300A-3500A_rev1.pdf

Transmitter Equipment and Station Details

Equipment Manuf / P/N:	Nextnet Wirless Base Station / Mobile Station

Number of Fixed Units:				4
Location of Fixed Antennas (Lat / Lon, Street Address)				1. **2111 NE 25th, JF3**
				2. **Hillsboro, Oregon**
				3. **97124**
NAD 27		**NAD 83**		4. **45.54350 deg N**
				5. **122.95870 deg W**

Number of Mobile Units	20
Radius of Mobile Unit location from Fixed station(s) (specify km)	1. All mobiles will be within a 20Km radius of base
	2.
	3.
	4.
	5.

Frequency Range / Tolerance	HIGH (MHz)	LOW(MHz)	% Tolerance
Station Number	1. **2560**	**2554**	0.004%
	2. **2572**	**2566**	0.004%
	3. **2584**	**2578**	0.004%
	4. **2596**	**2590**	0.004%
	5.		

Transmitter Parameters	Modulation	Bandwidth	Power Out dBm
Station Number	1. OFDM 4,16,64 QAM	3/3.5/5/5.5/6	+27
	2. OFDM 4,16,64 QAM	3/3.5/5/5.5/6	+27
	3. OFDM 4,16,64 QAM	3/3.5/5/5.5/6	+27
	4. OFDM 4,16,64 QAM	3/3.5/5/5.5/6	+27
	5.		

Antenna Details	Type	Gain (dB)	Beam Width (H)	Beam Width (V)	HAAT (meters)
Station Number	1. Sectorized 2.5GHz TilTek or similar	17	90	2.5	30
	2. Sectorized 2.5GHz TilTek or similar	17	90	2.5	30
	3. Sectorized 2.5GHz TilTek or similar	17	90	2.5	30
	4. Sectorized 2.5GHz TilTek or similar	17	90	2.5	30
	5. Omni antennas for mobile (up to 20)	7	0	360	n/a