We believe that this 802.16 WiMAX technology is the future of broadband wireless and will reach millions of people in under-served areas in the United States. Ball State University, in partnership with leading telecom companies, has a plan to test the 3.5 GHz, WiMAX technology and share the findings with others. It will allow Ball State University the opportunity to learn and evaluate equipment based on the IEEE 802.16 standard. The initial goal is to determine the feasibility of this technology to deliver high bandwidth and determine advantages and disadvantages as compared to existing non-licensed frequency data delivery mechanisms. Further, the testing performed during this development will serve to identify and correct any issues related to "real world" implementation. Questions of quality of services, ease of use, and client transparency will be explored, tested, and reported to national audiences and partners.

The goal is to use certified 802.16 equipment and deliver broadband data to multiple remote sites and monitor them in a working environment. Ball State University also wants to study the signal propagation of the frequency using smart antennas and baseband Radio Frequency Integrated Chip (RFIC).

At the end of the research Bal State University will be able to use the data acquired to report its finding on the use of 802.16 as a new generation of broadband data delivery network.

Please note the following complete transmitter data, which does not fit within the form:

ALVARION	BMAX-MBST-IDU-2CH-AC	4 units
ALVARION	BMAX-CPE-ODU-PRO-E-3-5	50 units

Please note the following complete modulation data, which does not fit within the form:

OFDM 256 FFT with adaptive sub-carrier modulation: BPSK, QPSK, QAM 16, QAM 64