

EXHIBIT - MODULATING SIGNAL DESCRIPTION

The proposed research will utilize the unlicensed spectrum bands for the 802.11 and 802.16 IEEE, and corresponding bandwidth allotments and is intended to work with commercially available, “off the shelf” radios.

Emission (E)	Modulating Signal (F)
DSSS (Direct Sequence Spread Spectrum) OFDM (Orthogonal Frequency Division Multiplexing)	IEEE802.11b: DBPSK (1Mbps) DQPSK (2Mbps) CCK (5.5/11Mbps) IEEE802.11g: BPSK (6/9Mbps) QPSK (12/18Mbps) 16-QAM (24/36Mbps) 64-QAM(48/54Mbps) IEEE802.11a: BPSK (6/9Mbps) QPSK (12/18Mbps) 16-QAM (24/36Mbps) 64-QAM(48/54Mbps)