

Question 7: Purpose of Experiment

The purpose of this experiment is to determine the feasibility of utilizing the UHF channels to provide long range non line of sight communications to rural areas of the state, not serviced by any other means. The goal is to understand the potential of utilization of TV white space , and to design system architectures to achieve optimal performance and efficient spectrum utilization.

Fixed point to point back-hauling as well as mobile networking applications will be explored. By utilizing available radio cards (Xagyl, Carlson) along with mini-itx motherboards, and embedded systems, programming and design will produce an experimental wireless networking product capable of providing inter-connectivity to rural as well as very remote areas of the state.