

Technical Description of the experiments related to experimental license application 0455-EX-PL-2011

Submitted by Spectrum Bridge Inc.

The purpose of this experimental license is to conduct research, tests and user trials of applications and services that utilize unlicensed TVWS.

The major focus of this research is to understand the capabilities and opportunities afforded by TVWS when integrated into personal/portable devices like smart phones and tablets.

The basic topography of the research is to deploy base stations/access points that support personal portable devices. Each trial may include up to 3 base stations to provide for scenarios that investigate co-existence issues as well as mobility (hand-off or re-association). Each of these base stations will be under the direct control of a TVWS DB, as provided by SBI, and will be in compliance with the TVWS rules.

The base stations themselves are experimental units that do not have FCC certification as TVWS devices. In addition to the base stations a number (5-8) personal portable devices will be in operation. These personal portable devices are also experimental though they will comply with the FCC rules of operation for TVWS devices.

The location of the trial will be (inserted by Nokia) and because the purpose of the experiment is to use personal portable devices the radios may be deployed anywhere within 2km of this location. The base stations will be located in convenient places where backhaul is available but never more than 30m HAAT.