

Exhibit 1: Description of Boundary County Community Television Program of Research and Experimentation

Boundary County Community Television respectfully requests the issuance of an experimental license using the equipment and operating parameters set forth in its application for an experimental license (FCC File No. 0229-EX-PL-2010) (the "Application"). Grant of this license will enable Boundary County Community Television to conduct research and experimentation using vacant spectrum in the television broadcast bands (the "TV white spaces") for the testing of fixed white spaces devices.¹

Boundary County Community Television is working jointly with Spectrum Bridge in investigating the usefulness of available white space (UHF/VHF) spectrum by providing rural broadband access and support of video, sensor, low power AM broadcast radio using IP streaming, Wi-Fi access and medical records exchange.

Boundary County Community Television and Spectrum Bridge will also be working with the U.S. Customs and Forest Service in application development and evaluation.

It should also be noted that the proposed venues located at Eastport and Porthill reside within 32 kilometers (20 miles) of the Canadian border. All use of TV white space channels in this area will be coordinated with Industry Canada. These venues will be used to investigate the feasibility of Broadband applications employed by the U.S. Customs Service, to aid in border control.

Spectrum Bridge will serve as a white space data base provider and assist in insuring compliance with the FCCs proposed white space rules.

As noted in the Application, Boundary County Community Television seeks experimental authorization to operate in rural Boundary County, Idaho and various locations within Bonners Ferry. Other fixed spoke devices may be located within the area of operation specified in the Application, but the total deployment will not exceed 15 devices. Spectrum Bridge will provide the necessary hardware and software to conduct these experiments. The intent is to utilize and apply TV White Spaces to enable broadband Internet access to underserved areas.

¹ See *Unlicensed Operations in the TV Broadcast Bands; Additional Spectrum for Unlicensed Devices, Below 900 MHz and the 3 GHz Band*, Second Report and Order and Memorandum Opinion and Order, 23 FCC Rcd 16807 (2008).

The proposed field study will operate fixed stations from the licensed center points using an outdoor antenna structure and the following parameters:

Lower and upper frequencies and frequency units	168 MHz-216 MHz, 470-512 MHz (channel size 6 MHz)
Power and power units	2 watts
ERP and ERP units	2 watts
Mean/peak	2 watts
Frequency tolerance	< 1 ppm
Station class (i.e., fixed or mobile).	Fixed

The equipment to be used for these experiments is manufactured by Spectrum Bridge. The solution incorporates a fixed “base station” connected to the internet via a dedicated T-1, cable modem or a DS3 connection. The base stations (hubs) provide broadband connections (approx 3 Mbits/sec (using an OFDM modulation and FSK)) to a number of fixed client devices that provide wireless connectivity (broadband access) where none exists today. One goal is to show how the lower frequency operation, combined with 6 MHz channels of TV white space provides a practical solution to providing broadband connectivity in difficult terrain. The devices are all fixed in location and monitored/managed remotely. It is the intention of Boundary County Community Television to upgrade the radios to commercial FCC-certified white space radios, when the rules and certification process is complete, to maintain services to the local community.

Boundary County Community Television’s experiments will use White Space radios controlled by a white spaces database managed by Spectrum Bridge. These experiments are expected to facilitate fixed operations in the white spaces without causing harmful interference to incumbent television stations. The experimental authorization will allow Boundary County Community Television to conduct research to demonstrate the potential of white spaces-based fixed networks to enable new wireless applications and services. Boundary County Community Television will not transmit on any channel or in a manner that impacts an incumbent television licensee entitled to interference protection.

Boundary County Community Television's experiments will have a reasonable promise of contribution to the development of the radio art. The Commission has indicated that it expects the availability of white space spectrum will promote the development and deployment of innovative new services. Boundary County Community Television and Spectrum Bridge believe that this research effort will further these goals by facilitating techniques to test the extent of over-the-air television contours and to promote interference-free operations in white spaces.

Boundary County Community Television fully anticipates that its experiments will further the development of innovative white spaces applications, and respectfully requests expedited processing of the Application.