

Special Temporary Authority Explanation and Purpose of Operation

Microsoft Corp. respectfully requests Special Temporary Authority to operate the transmitters described in the application file number referenced above. Microsoft has been an active participant in the Federal Communication Commission's television white spaces proceeding (ET Docket No. 04-186) for several years, and currently holds two experimental authorizations issued by the FCC Office of Engineering and Technology (call signs WF2XBT and WF2XQL) permitting white spaces experimentation in Redmond, Washington.

Microsoft requires this short term authorization to demonstrate a potential service that could be made available over sub-1 GHz white spaces spectrum in the TV bands at the location and dates specified in the application. Specifically, Microsoft seeks to demonstrate fully interactive Xbox Live HD (1080p) video streaming over TV band white spaces spectrum. This demonstration will employ transmitting equipment previously authorized in Microsoft's experimental licenses, and will also demonstrate Microsoft Research's prototype white spaces database, which controls white space device access to ensure non-interference with protected incumbents.

Although the Commission has approved rules for white spaces operations, Special Temporary Authority is required because the Office of Engineering and Technology is currently in the process of reviewing conditionally designated white spaces databases to ensure competency, consistency, and compliance with the FCC's rules. OET is also hosting workshops with the conditionally designated white spaces databases and conducting real-world testing of databases to ensure that they provide accurate and consistent results before they are made generally available for use by TV band devices. In addition, each database will be subject to a trial period of not less than 45 days before it is allowed to be made available for actual use by TV band devices. Accordingly, authorized white spaces databases will not be in operation at the time of this demonstration.