

ATSC Laboratories, Inc. ("ATSC") respectfully requests the issuance of an experimental license to operate, as described in this Application, fixed and mobile equipment, to permit ATSC to conduct research and experiments in vacant spectrum within the television broadcast bands at 54-72 MHz, 76-88 MHz, 174-216 MHz, 470-608MHz, and 614-698 MHz (the "White Spaces"). The experiments will enable ATSC to perform technical demonstrations of equipment and techniques, and to test equipment in connection with its production and approval. ATSC is of the opinion that the experiments it proposes to undertake possess the promise of contributing to the development, expansion, and utilization of the radio art, including by promoting the development of innovative wireless applications and services for the benefit of public and private users of spectrum, consistent with the Commission's goals for creating in the White Spaces a wireless service that can increase the availability of mobile devices and their functionality.

ATSC will conduct research and experiments of fixed and personal/portable devices within the White Spaces to analyze the potential utility and feasibility of such operations and technology. In particular, ATSC wishes to determine the impact of such operations and technology in a densely packed "in use" channel structure, consisting of underserved rural and urban populations. As part of its efforts, ATSC will test all available means of modulation in a wide range of conditions in order to determine whether and how such equipment can be commercially viable.

ATSC requests authorization in the Reno, Nevada area, where ATSC proposes to undertake its work and where maintains its facilities. In undertaking this experimental work, ATSC proposes to operate up to 15 fixed base stations as otherwise described in the Application. ATSC will not transmit on any spectrum licensed for incumbent broadcast television operations, and operations will be performed in accord with the power limits, antenna requirements, emission limits, and interference avoidance methods adopted by the Commission in Unlicensed Operations in the TV Broadcast Bands, ET Docket No.. 04-186, 23 FCC Rcd 16807 (2008) and 25 FCC Rcd 18661 (2010).