

EXHIBIT 1

Narrative Statement

Texas Instruments Incorporated ("TI"), proposes to research and experiment with commercial quality transceivers, omnidirectional antennas, and directional antennas designed to operate in the 27.5 - 29.5 GHz frequency range in order to develop high-quality broadband communications in that spectrum. TI also requests authority to demonstrate its prototype equipment to potential customers nationwide. Optimization of transceiver components and antenna designs will be based on the data obtained in this program of research, experimentation, and demonstration.

More specifically, digital and analog data transmissions will be made to determine the appropriate encoding and decoding requirements. Effective transmission range will be determined for various weather conditions and signal attenuation due to vegetation, vehicles, and buildings.

Furthermore, TI seeks authority to experiment with various modulation techniques to ensure optimum data transfer at this frequency range. Accordingly, TI asks that its license specify "various," or similar nomenclature for the emission designator.¹ If this flexibility is not possible, TI requests that emission designator "1M6D7W" be specified, for TI believes this designator would provide maximum flexibility for experimentation with various modulation techniques.²

¹ See Part 1.3 of the FCC's Rules, 47 C.F.R. § 1.3 (1993), which sets forth Commission authority to grant waivers.

² See *id.* at § 2.201.