

EXHIBIT: Statement of Purpose for Authorization

7. *If all the answers to Items 4, 5, 6 are "NO" include as an exhibit a narrative statement describing in detail the following items:*

a. The complete program of research and experimentation proposed including description of equipment and theory of operation.

In the "Third Report and Order Memorandum and Opinion" in ET Docket No. 95-18 et al (FCC 03-280) the Commission established frequency allocations for two DRL bands, at 2025-2025.5 MHz and 2109.5-2110 MHz. Modulation Sciences is a manufacturer of equipment for specialized communications use in connection with ENG operation, and intends to develop equipment and techniques for this DRL use.

b. The specific objectives sought to be accomplished.

The test and development program will test a variety of formats and equipment configurations for DRL use over actual propagation paths, including areas with significant urban clutter.

c. How the program of experimentation has a reasonable promise of contribution to the development, extension, expansion or utilization of the radio art, or is along a line not already investigated.

The project will focus on obtaining input from vendors of components, building a test environment for simulation of actual operating conditions for ENG use, and obtaining all necessary input for pre-commercial system readiness.

ANTENNA DATA

The antenna proposed is directional, but the horizontal plane orientation will not be fixed in order to accomplish testing over a variety of propagation conditions. The vertical elevation of the antenna will be in the horizontal plane. The $\frac{1}{2}$ power beamwidth of the antenna is 8.6 degrees, and the antenna gain is 26.4 dB.