

EXHIBIT I

Telesciences Transmission Systems, Inc. ("Telesciences") herein seeks experimental authority, pursuant to Part 5 of the Commission's Rules, 47 C.F.R. Part 5 (1990), to use the microwave frequencies in the 18, 21, 23 and 38 GHz frequency range (specific frequencies are identified on Telesciences' FCC Form 442) to operate microwave radio equipment on a nationwide basis to conduct market tests and equipment demonstrations.

Telesciences is a leading manufacturer of high quality, state-of-the-art microwave radio equipment that operates on a variety of frequencies. Telesciences requests experimental authority to enable it to demonstrate its radio products for prospective customers and users located throughout the country as well as to conduct important market and technical tests as contemplated by the Commission's Part 5 Rules. Accordingly, Telesciences specifically requests experimental authority pursuant to Sections 5.202 (d) (technical demonstrations), 5.202 (f) (field strength surveys) and 5.202 (f) (equipment demonstrations for prospective customers) of the Commission's Rules. 47 C.F.R. §§ 5.202 (d), (e) and (f).

On September 6, 1990, the Commission granted an experimental license to Telesciences^{1/} for its experimental operations on the

^{1/} The license, now expired, was initially granted to Motorola Microwave, a partnership between Motorola, Inc. and certain of its subsidiaries and TeleSciences, Inc. (Telesciences Transmission Systems, Inc.'s parent company) and certain of its subsidiaries. The operations of Motorola Microwave were recently merged into Telesciences Transmission Systems, Inc.

18, 21 and 23 GHz frequencies under the KB2XOV call sign. (A copy of that license is attached.) That authorization expired on June 1, 1992. Accordingly, this application requests that (1) the license for the 18, 21 and 23 GHz be reinstated, and (2) new experimental authorization be granted for operations on the 38 GHz frequencies identified on the FCC Form 442 of which this exhibit is a part. Telesciences requests that the Commission issue the experimental license under the same call sign (KB2XOV).

Telesciences seeks experimental authority herein subject to similar terms and conditions as the license previously granted by the Commission. In particular, Telesciences requests experimental authority to operate its equipment in various locations throughout the United States. Because the technical parameters (i.e., power emissions and antenna parameters) specified in Parts 21 and 94 of the Commission's Rules vary in different segments of the requested bands, Telesciences recommends that the license provide general authority to operate in accordance with the technical parameters contained in Parts 21 and 94 rather than specifying particular parameters on the experimental license to be issued.^{2/}

Further, Telesciences recommends that certain conditions be placed on the license in lieu of requiring the Company to request

^{2/} Consistent with the prior experimental license, Telesciences proposes that the requested license refer to operation in accordance with Parts 21 and 94 rather than identifying the specific power requirements and emission designators of equipment operated pursuant to the experimental license.

special temporary authority at each test location. Specifically, consistent with its previous authorization, Telesciences proposes that the requested license indicate that the Company must obtain concurrence from a recognized frequency coordinator prior to equipment operation to avoid any harmful interference to other users. Telesciences also proposes that the license indicate that operation shall be limited to 90 days at any given location and that operation in excess of 90 days will require special temporary authority. These conditions will avoid the administrative burden on the Commission and the Company of obtaining special temporary authority for each new location while ensuring that other spectrum users are adequately protected from harmful interference.

Telesciences requests experimental authority for a period of two years, pursuant to Section 5.63 of the Commission's Rules, 47 C.F.R. § 5.63 (1989). Consistent with Section 5.68 of the Commission's Rules, 47 C.F.R. § 5.68, Telesciences will not operate its experimental radio equipment in a manner that will cause harmful interference to existing users of the spectrum.

Grant of the requested experimental authority will serve the public interest by improving the dissemination of information concerning radio products in the equipment marketplace, fostering increased competition in the microwave equipment market, and facilitating the development and introduction of new innovative radio products to the public.