

**REQUEST FOR PERMANENT EXPERIMENTAL AUTHORITY****\*\* EXPEDITED PROCESSING REQUESTED \*\****Program of research and proposed experimentation:*

TerreStar Networks, Inc. ("TerreStar") is preparing to deploy a national telecommunications system, based on integrated satellite/ground-based technology, which will provide universal mobile telephone service throughout the continental United States and extending into Canada. The instant request for an experimental license addresses the need to conduct tests at a company facility in Richardson, Texas. The tests are associated with a terrestrial ground-based air interface that will be founded on the 3GPP standard (UMTS Release 6), which uses WCDMA.

At present, there is no commercially available equipment satisfying TerreStar's operational standards. Accordingly, TerreStar is seeking authority herein to conduct its tests using off-the-shelf base stations having performance characteristics that are similar to the equipment TerreStar ultimately will use. The units are manufactured by Nokia.

TerreStar requests **expedited processing** of its application. The company needs to begin its testing on or before December 1, 2006, in order to maintain a schedule for demonstrating its technology for various agencies of the Federal government that are interested in the technology for homeland security and emergency response purposes.

*Specific objectives sought to be accomplished:*

See above. TerreStar's primary interest is application, technology and system integration testing. Over-the-air testing will be limited to in building testing at lower power levels utilizing indoor pico cell antennas and signal attenuators. Lab testing will be conducted in such a manner that RF will be contained within the building.

*Program of experimentation has a reasonable promise of contribution to the development, extension, expansion, or utilization of the radio art:*

Successful integration of WCDMA experimental testing will allow TerreStar to complete engineering objectives that are not possible today due to lack of equipment availability at company specifications. Knowledge acquired from testing associated with this program of study will be necessary to successfully complete RF engineering efforts that tie all network elements together. Successful completion and knowledge gained from this program will allow TerreStar to provide high capacity service to customers in areas where this technology is deployed.