
Background

Advanced Metering Data Systems, LLC (AMDS) is in the process of designing, manufacturing and marketing radio-based, utility meter reading systems that will operate pursuant to Part 22, Part 90 and Part 101 of the FCC's Rules. Through the use of these products, utility companies will automate their meter reading activities, thereby increasing efficiency and reducing administrative costs. AMDS seek to develop new products to take advantage of new technology. As part of its normal product development processes, the applicant must test these devices within its manufacturing facility and in the field to study performance of its products under real world conditions.

Therefore, AMDS requests an experimental under Part 5 of FCC Rules. Specifically, the authority requested herein will allow AMDS to:

- test the performance of its meter reading systems in different types of meters to ensure device compatibility;
- test the performance of its meter reading systems in different frequency bands;
- test the new technology's ability to overcome difficulties associated with the varying placement of utility meters;
- test the viability and demand for various ancillary data collection services; and
- evaluate the performance of the new equipment in variety of operating environments.

Determining the degree to which utilities in various situations (such as described in this application) find AMDS' meter reading solutions useful in solving problems associated with data collection, and are willing to purchase accordingly, will allow AMDS to tailor the system before the final product design and commercial rollout.

Frequency Bands Requested

AMDS requests authorization in three bands between 700 MHz and 960 MHz. Current designs are optimized for this range in frequencies. Specifically, within this range of frequencies, AMDS requests authorization in the following sub-bands:

746-794 MHz: Spectrum in this band was allocated to band managers under FCC Auctions 33 and 38. AMDS would like the flexibility of allowing its clients to lease spectrum from these band managers and therefore needs to test the characteristics of this band.

840-902 MHz: The 800 MHz band is licensed for private land mobile radio service (PLMRS) use under Part 90 and for cellular use under Part 22. Utilities are significant users of the spectrum authorized under Part 90 and while the band is intended primarily

for base/mobile use, AMDS' technology could operate as an ancillary user of this spectrum. Field testing is needed to understand this environment in day to day use.

Part 22 cellular operations provide an extension infrastructure that present spectrum opportunities for AMDS. AMDS seeks to evaluate this band for that purpose.

928-960 MHz. This range of channels is governed by Part 90 and Part 101. AMDS seeks to evaluate Part 90 900 MHz spectrum and the multiple address system (MAS) bands available under Part 101.

Locations

The proposed system will use an interrogate-and-response configuration to acquire meter data. The central "base" station will collect meter data from units installed within 20 miles of the base.

The applicant would like the flexibility to test the equipment in a variety of markets. Therefore, nationwide operation is requested.

Testing Plan

AMDS will test various products throughout the United States in cooperation with utility partners in order to finalize the equipment design. The most significant testing will occur within the next 6 months, and will extend over the next 24 months. Following the testing period and equipment certification, AMDS will the authorization for continued product improvement test and sales and marketing demonstrations.

Summary

AMDS has provided a summary of the need for an experimental license, detailed the bands to be tested and provided a general test schedule. The applicant respectfully requests authorization of an experimental license under Part 5 of the FCC Rules.

Please direct questions regarding this filing to H. Britton Sanderford, Jr., AMDS' president. Mr. Sanderford can be reached at (504) 283-9500.