

Narrative Statements

[IAW 10(a)] *The complete program of research and experimentation proposed including description of equipment and theory of operation:*

The National Capital Region¹ (NCR) is planning to deploy a Regional Wireless Broadband Public Safety data network in the public safety portion of 700 MHz band. This will be the first network of this kind. The NCR has been granted a waiver to the Commission's Part 90 rules to facilitate this deployment (a copy of which is attached elsewhere in this package).

Over the next 6 months, and before this network begins regular customer operations, the NCR desires to deploy equipment, radiate signal and experiment with network elements in the District of Columbia and the City of Alexandria.

This network will utilize 1xEVDO rev A technology, and will be manufactured with transmitters and receivers utilizing a pair of 1.25 MHz broadband channels operating within the Public Safety portion of the 700 MHz band (within the data segment).

[IAW 10(b)] *The specific objectives sought to be accomplished:*

Deploy and test the operation of up to 12 base stations in the District of Columbia, using bespoke radio and filter equipment, in order to test the coverage and operation of this equipment, before expanding this network in the rest of the NCR. Before customers are migrated to this network, the NCR anticipates approval of the permanent use of this spectrum from our Regional Planning Committee (RPC-20), permanent license approval from the Commission at which point this experimental license will be surrendered.

Specific objectives will include:

- Test performance and coverage of at least 10 (and up to 12) base stations, qualifying the characteristics of these fixed assets. "Drive" testing to optimize the placement of base stations and antennas.
- Test the performance of broadband wireless mobile devices operating in the District of Columbia and the City of Alexandria, VA, qualifying the characteristics of these mobile assets. (The operation of assets in the City of

¹ The National Capital Region includes eighteen jurisdictions: The District of Columbia, Montgomery and Prince George's Counties of Maryland, and the cities of Gaithersburg, Rockville, Takoma Park, Bowie, College Park, and Greenbelt; Arlington, Fairfax, Loudoun and Prince William Counties of Virginia, and the cities of Alexandria, Falls Church, Town of Leesburg, Manassas and Manassas Park. See the National Capital Planning Act of 1952, 40 U.S.C. § 71.

Alexandria will be performed under the authority of a similar experimental license being requested by the City of Alexandria.)

[IAW 10(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.

This will be the first implementation of a broadband wireless EVDO network in the public safety data spectrum. Our experimental testing of this network will yield valuable insight into practical operations, building on the lessons learned from our previous pilot network (the Wireless Accelerated Responder Network, an OFDM network currently in use within the District under terms of a previous experimental license).

As in the past, we will share the results from this testing with interested first responders, regulators and legislators.