

Related to the Nokia application for a CBRS Experimental License File No. 0496-EX-CN-2018

Planned accomplishments of the pilot/trial

Program of research and experimentation proposed including description of equipment and theory of operation:

“Utilities have traditionally deployed Wi-Fi and WiMax networks to satisfy their wireless data demand. Wifi has become crowded and WiMax has reached end of life. CBRS enables utilities to use cost-effective mobile broadband in shared frequencies without the need to purchase licensed spectrum, FCC governance provides guidance that assists with reducing interference issues that limit the mobile broadband customer experience over unlicensed spectrum. CBRS enables Private LTE networks with high capacity, easy deployment and excellent customization options. Utilities can use private LTE coverage that is reliable, scalable and offers seamless mobility. This will benefit large remote sites that often do not have conventional 3GPP LTE coverage, such as remote utility hubs. Utilities are in a prime position to use CBRS to deploy LTE in support Internet of Things (IoT) as there are numerous sensors, meters and other utility end points that can be served.

The grant of the requested experimental license will allow Nokia to

CBRS offers attractive unit economics for mobile coverage and capacity. Up to 150 MHz of favorable mid-band spectrum and it is expected low spectrum acquisition costs will open new business opportunities that have been prohibitive in the past. With the support of all four major mobile operators in the U.S., and the existing use of 3.5 GHz as an LTE band in other parts of the world, the device ecosystem support for the 3.5 GHz CBRS band/technology is more likely than ever, and the broadening ecosystem is likely to bring scale advantages and consequently low-cost solutions. Comparative unit economics in terms of monthly cost to deliver a gigabyte of data shows that a CBRS base station can potentially deliver a 40% reduction relative to a traditional LTE small cell leveraging licensed spectrum.”

Specific objectives thought to be accomplished:

Prove that CBRS can be used as superior mobile connectivity technology for use cases mentioned above to increase enterprise operations efficiency.

