

**TO:** FCC ELS

**FROM:** Joseph Feldmeth, Principle Engineer

**DATE:** 22AUG2019

**MEMORANDUM FOR RECORD:** Frequency Utilization Narrative

**REFERENCES:** File Number: 0655-EX-CN-2019

**PURPOSE:** The purpose of this MFR is to detail why utilization of the requested frequencies in file number 0655-EX-CN-2019 are necessary, and how and where experimental equipment will be utilized. In accordance with requirements of Net Vision Consultants (NVC) contract with the US Government, NVC is required when necessary to provide realistic training, training that mirrors real world cellular networks and infrastructure. To do this NVC utilizes software defined radios to replicate cellular networks. Similar to OpenBTS systems or PICO Cells distributed throughout the US by service providers, test and private networks established by NVC will have a very small radius <1000ft., be closed off to the outside world, and generate no revenue. The network technology will vary by location and training objectives, transmit power will not exceed 1W, with transmission periods being short periods of time. Exercises are typically ten days in duration, with actual transmission time being much less than the overall period of instruction (POI).

Nationwide coverage is being requested because training locations are defined per exercise and spread out across the United States thereby preventing NVC from being able to specify mobile locations in advance.

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