pennsylvania
STATE POLICE
STATEWIDE RADIO NETWORK DIVISION

September 2, 2015

Office of Engineering and Technology
Experimental Licensing Branch
Federal Communications Commission
445 12th Street, SW
Room 7-A322
Washington, DC 20554

Subject: Request for Special Temporary Authorization (STA) by the Commonwealth of Pennsylvania, Statewide Radio Network Division (FRN 0003178472) for LTE testing, assisting with communications for the Papal visit to Philadelphia on September, 2015, using FirstNet Band Class 14 (700 MHz) frequencies
(Also, see attached, "Papal visit Preliminary Design 08-25-2015_R1.pdf" document.)

To Whom It May Concern:

New Jersey is loaning the STARNet Division of the Pennsylvania State Police, Commonwealth of Pennsylvania (FRN 0003178472), several of New Jersey's COWs (cells on wheels) currently licensed for use by New Jersey; and the Commonwealth is in need of Special Temporary Authorization (STA) to operate these COWs in Pennsylvania by our office for the Papal visit. Our office is requesting a grant of this STA, per FCC Rule 1.931(b) (2) (iv), "For temporary, non-recurring service where a regular authorization is not appropriate;" and (v) "In other situations involving circumstances which are of such extraordinary nature that delay in the institution of temporary operation would seriously prejudice the public interest;" and because this STA is considered an experimental purpose as it is associated with FirstNet's existing authorization with the FCC.

The Commonwealth of Pennsylvania has coordinated our request with FirstNet to utilize the Band Class 14 (700 MHz) frequencies; and the STA is necessary to provide essential communications to help secure the Papal visit in the Philadelphia area on September 25, 26, 27, 2015. Our office is requesting an immediate grant for use of subject frequencies until September 30, 2015. Per 1.931(a)(2), our office is requesting the subject STA for 30 days or less and we do not plan to file an application for regular authorization of the subject operation.

The FirstNet Deployables in the Philadelphia area at each of the four locations (LTE eNodeB) are Nokia Flexi Multiradio 10 Base station, model GX4000_R3.0, (10M0F9W emission), TX 758-768 RX 788-798 (MHz), 400 watts ERP. User devices are Sonim XP7 handheld smart phone and Harris MBL100 vehicular modem (8M96G7D emission), TX 788-798 RX 758-768 (MHz), 1 watt ERP.

US Customs, 200 Chestnut St.	39-56-52.62N	75-08-39.77W
Federal Courthouse, 601 Market St.	39-57-5.10N	75-09-4.28W
9th and Filbert St.	39-57-9.54N	75-09-11.48W
1540 Spring St.	39-57-26.68N	75-09-54.29W

The deployable LTE system utilized during the STA time period contains three directional panel antennas to create an omnidirectional pattern. Each deployable COW contains three panel antennas with a half power (3dB) beamwidth at 65 degrees. The combination of these three panel antennas, each connected to a unique and corresponding radio within the deployable trailer, creates a virtual omni-directional antenna pattern. We are utilizing the same antenna pattern and radio configuration as traditional cellular radio sites. The three panel antennas are traditionally aimed at 0 degrees, 120 degrees and 240 degrees azimuth or the horizontal plane. The antennas are initially set to place all energy in the vertical plane on the horizon (zero degrees of down-tilt), but can be remotely changed using Remote Electrical Tilt (RET) to set a 0-10 degree down-tilt in the vertical plane to optimize cell performance.

The Commonwealth understands that FCC Rules concerning interference shall be complied with and any issues can be directed to STARNet Network Operations Center (NOC), 1-877-838-8999.

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