

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
North Carolina State Highway Patrol)	File No. 0010444325
Waiver Request to License two 800 MHz)	DA 23-766
Specialized Mobile Radio Pool Channels)	

REPLY COMMENTS OF APCO INTERNATIONAL

The Association of Public-Safety Communications Officials, International (APCO),¹ submits these brief reply comments to confirm that it stands by its certification of North Carolina State Highway Patrol’s application related to the request for waiver to use two 800 MHz Specialized Mobile Radio channels. At the time of certification, no B/ILT channels were available. Subsequently, B/ILT channels became available, and at the Commission’s request APCO evaluated the suitability of these channels as an alternative to the requested SMR channels. The newly available B/ILT channels did not meet the applicant’s technical requirements. The attached letter provides additional information from the applicant regarding unsuitability of the B/ILT channels.

Respectfully submitted,
APCO INTERNATIONAL

By:

Jeffrey S. Cohen
Chief Counsel
(571) 312-4400 ext. 7005

¹ Founded in 1935, APCO is the nation’s oldest and largest organization of public safety communications professionals. APCO is a non-profit association with over 40,000 members, primarily consisting of state and local government employees who manage and operate public safety communications systems – including 9-1-1 Emergency Communications Centers (ECCs), emergency operations centers, radio networks, and information technology – for law enforcement, fire, emergency medical, and other public safety agencies.

cohenj@apointl.org

Mark S. Reddish
Senior Counsel
(571) 312-4400 ext. 7011
reddishm@apointl.org

Alison P. Venable
Government Relations Counsel
(571) 312-4400 ext. 7004
venablea@apointl.org

September 27, 2023

Attachment

CERTIFICATE OF SERVICE

I, Alison Venable, certify that I have on this 27th day of September, 2023, caused to be forwarded via electronic mail the foregoing Reply Comments to the following:

Scott Smith
North Carolina State Highway Patrol
scott.r.smith@NCDPS.gov

Robin Cohen
Enterprise Wireless Alliance
Robin.Cohen@enterprisewireless.org

Elizabeth R. Sachs
Lukas, LaFuria, Lantor & Sachs, LLP
lsachs@fcclaw.com

/s/ Alison Venable



North Carolina Department of Public Safety

State Highway Patrol

Roy Cooper, Governor
Erik A. Hooks, Secretary

Freddy Johnson, Jr.
Commander

TECHNICAL SERVICES UNIT
3318 Garner Road, Bldg #2
Raleigh, NC 27610-5618

25 September 2023

Federal Communications Commission
Public Safety and Homeland Security Bureau 1270 Fairfield Road
Gettysburg, PA 17325

Re: State of North Carolina, State Highway Patrol – Supplemental Technical Information
Supporting 800 MHz Waiver Request for Frequency 856.5375 and 859.0375

The State of North Carolina, State Highway Patrol in cooperation with APCO has performed the necessary analyses to determine the availability of the proposed channels. Following is supplemental technical information explaining our system requirements.

Less than 150KHz separation will result in the following to our legacy system. The 7/800 MHz 6 channel combiners we utilize throughout our system are specified from the manufacturer as having a minimum frequency separation of 150 KHz. During in service field tests anything less than this separation has led to degradation on any adjacent channel(s) that were previously in service without issue(s). S21 VNA sweeps show a minimum of 3 dB of degradation on the on-frequency channel as well as on the adjacent channel(s) that are under 150 KHz spacing. The reject port loads on the combiners are of 25W capacity and with 100W stations 3 dB into the reject port can degrade it to such a point that it physically burns out. This will cause that channel to go out of service and if others are under 150 KHz they may also go out of service. On sites that carry life safety traffic having channels degraded 3 dB and the possibility existing of one or more channels going out of service due to reject load(s) burning out anything less than 150 KHz is not an option for our system. When the reject ports burn out a lengthy outage is required to remove the combiner and best case replace the reject loads on the 6-channel combiner. Worst case the entire combiner must be replaced due to damage to the tuning mechanism inside the cavities. Regardless of the required work the costs as well as the lengthy downtimes are not something we/our users need to endure for less than optimum channel spacing.

Scott Smith

Joseph Allison
Chairman, Region 31 (800 MHz)
Joseph.Allison@ncdps.gov
919-662-4440
919-662-4444 (FAX)

Cc: Scott Smith

MAILING ADDRESS:

4231 Mail Service Center
Raleigh, NC 27699-4231
www.ncdps.gov
www.ncshp.org



An Equal Opportunity Employer

OFFICE LOCATION:

512 N. Salisbury St.
Raleigh, NC 27604
Telephone: (919) 733-7952
Fax: (919) 715-4059