NPSTC
NATIONAL PUBLIC SAFETY TELECOMMUNICATIONS COUNCIL

April 12, 2012

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Re: WT Docket No. 11-69, ET Docket No. 09-234

Dear Ms. Dortch:

The National Public Safety Telecommunications Council (NPSTC) is a federation of public safety organizations whose mission is to improve public safety communications and interoperability through collaborative leadership. NPSTC pursues the role of resource and advocate for public safety organizations in the United States on matters relating to public safety telecommunications. Accordingly, NPSTC provides guidance on issues that can either negatively impact or benefit the operation of public safety communications.

NPSTC submits these ex parte comments in the above-captioned proceedings. While NPSTC does not oppose TETRA for non-public safety use, we believe the Commission should move forward cautiously to ensure no interference results to any adjacent public safety channels. Use of TETRA in the public safety channels should not be approved; TETRA would be especially problematic in the 800 MHz band NPSPAC channels.

On April 26, 2011 the Commission issued a combined Notice of Proposed Rulemaking (NPRM) regarding proposed rules relating to TETRA equipment certification and operation, and an Order which granted in part a request for waiver by the TETRA Association, pending outcome of the rulemaking proceeding. The Commission granted the waiver of sections 90.209 and 90.210 of the rules concerning authorized bandwidth and emission limits, subject to certain conditions. The waiver allows certification of TETRA equipment that does not meet current mask or bandwidth requirements in the rules and allows its deployment in the industrial business channels of the 450-470 MHz band and the ESMR channels in the 800 MHz band.

Proposed rules in the NPRM would expand allowed deployment of equipment such as TETRA with an authorized bandwidth up to 22 kHz in the 406-512 MHz band and the entire 806-824/851-869 MHz band spectrum, including NPSPAC and other public safety channels. However as part of the NPRM, the Commission requested comments on the impact to public safety interoperability and on potential near-far interference.

In previous comments filed in these proceedings, NPSTC raised concerns about both interoperability and potential interference, especially in the 800 MHz NPSPAC channels. Recently, ex parte filings have been submitted in this proceeding by APCO International, Harris Corporation, Motorola Solutions, New Jersey Transit, PowerTrunk and Alcatel Lucent. To varying degrees, these filings address the interference potential of TETRA equipment, interoperability issues and interpretations surrounding Commission certification of specific "modified TETRA" equipment.

NPSTC's position is quite straightforward. First, NPSTC does not oppose TETRA for non-public safety use. Our primary interest is preventing interference from TETRA use in the public safety channels, especially the 800 MHz NPSPAC band and ensuring that any introduction of TETRA meets established rules and policies for public safety interoperability.

Interference potential is affected both by the technology and the spectrum environment in which it is introduced. The NPSPAC portion of the 800 MHz band is a unique spectrum environment.[1] In the NPSPAC portion of the band, channel centers are spaced every 12.5 kHz, while channels themselves are nominally 25 kHz wide. When the Commission adopted rules for the NPSPAC channels, it required reduced transmitter deviation, compared to that used for standard 25 kHz channel equipment. Regional planning, based on prevalent equipment parameters such as reduced deviation, incorporates geographic spacing between adjacent channels to minimize interference. Given the environment in the NPSPAC channels, NPSTC believes that TETRA emissions are likely to cause significant adjacent channel interference because of the power contained in the sidebands.[2]

Because of historical issues with interoperability, Commission rules for the NPSPAC portion of the 800 MHz band established five mutual aid interoperability channels and require equipment certified and marketed for public safety operation to have the capability to be programmed on those mutual aid channels. Further, the rules require that the NPSPAC channels be assigned in accordance with policies defined in the Report and Order of Gen. Docket No. 87–112 and also reference the provisions of that proceeding in defining operations on the 5 mutual aid NPSPAC

[1] Originally, the NPSPAC channels were located in the 821-824/866-869 MHz portion of the band. However, due to 800 MHz rebanding, the NPSPAC channels were relocated to 806–809/851–854 MHz. The transition of systems to the revised NPSPAC band segments is still ongoing.

[2] See Ex Parte Notice, WT Docket No. 11-69, ET Docket No. 09-234 submitted by Harris Corporation March 16, 2012, graphic at page 3.

channels.[3] We understand that TETRA does not provide an analog voice capability, which would prevent use of the mutual aid interoperability channels.

NPSTC urges the Commission to consider these adjacent channel interference and interoperability issues in taking further action in this proceeding.

Respectfully submitted,

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cc:

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[3] See 47 CFR §90.203(i) and §90.617(a)(1).