

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of )  
Amendment of Sections 90.20(d)(34) and )  
90.235 of the Commission's Rules to facilitate ) PS Docket No. 13-229  
the use of Vehicular Repeater Units )  
)

**COMMENTS OF THE STATE OF OHIO**

The State of Ohio ("State" or "Ohio") is pleased to submit the following comments in response to the Commission's *Notice of Proposed Rulemaking*, FCC 13-121, released September 16, 2013 ("NPRM") in the above captioned proceeding<sup>1</sup> regarding vehicular repeater systems ("VRS") used by public safety licensees to expand radio coverage for portable radios in emergency systems.

The State operates a 700 MHz and 800MHz Project 25 Phase 1, soon to be Phase 2, statewide, fully interoperable, voice and data radio system known as the Multi-Agency Radio Communications System ("MARCS").

Currently there are over 1,500 State and local public safety agencies plus a few Non-Governmental Agencies ("NGO") by Waiver, utilizing more than 50,000 subscriber units.

The overall system design is for mobile radio coverage with portable coverage assured only in the four major urban areas (Columbus, Cleveland, Dayton and Cincinnati). Additional areas of portable coverage are being added due to cooperative sharing agreements with various cities and counties which will permit MARCS users to operate on those systems when in their service areas. Likewise, when outside their service areas, those local agency users are afforded full access to the statewide MARCS.

Even with these sharing agreements, there are still large areas of Ohio left with only mobile radio coverage which is often not satisfactory when a law enforcement officer, fire-fighter, medic or other emergency worker is away from their vehicular radio.

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<sup>1</sup> The *NPRM* begins at paragraph 41 of the Commission's "*Order and Notice of Proposed Rulemaking*".

Ohio was fortunate to have been able to review the Draft Comments of APCO on this matter and fully supports them. A few of our MARCS users may operate in those lower VHF and UHF bands for their VRS but we would like to expand on APCO's suggestion concerning the 700 MHz Guard Band spectrum.

Many of our system users who need VRS have been applying for 700 MHz Low Power frequency assignments through our Region 33 700 MHz Planning Committee ("RPC"). By the use of these 700 MHz band frequencies, agency personnel only have to carry one portable radio, capable of both the VRS frequencies and accessing MARCS direct when within portable coverage (close proximity of a serving tower site).

Both manufacturers of mobile repeaters operating "in-band" have told us that operating less than 2 MHz from system operating frequencies may cause degraded operation. Obviously no system of any size (such as MARCS) cannot not utilize the entire band, so the use of the Low Power frequencies, which are at the far ends of the band are the next best available spectrum if agencies wish to support the preferred use of only carrying one portable radio.

For the most part these Low Power assignments have working satisfactorily but we can see a time, possibly in the near future, when these nine (9) *RPC* controlled frequency pairs, even with geographic coordination, will reach the point of causing potential interference to other near-by users.

APCO states that the use of the illustrated Guard Band frequencies would likely not cause interference to Broadband operations in the main portion of the Broadband allocation.

Being able to use the 700 MHz Guard Band frequencies would both give us more frequencies and be further removed from the narrowband voice spectrum, thus diminishing the interference potential between the MARCS system and the agency VRS.

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For the reasons set forth above, Ohio fully supports APCO's position and also hopes the Commission will seriously consider further investigation into the potential use of the 700 MHz Guard Band spectrum for situations such as ours.

Respectfully



Darryl L. Anderson  
MARCS Program Director  
State of Ohio  
December 31, 2013