

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

In the Matter of)
)
NATIONAL BROADBAND PLAN) GN Docket Nos. 09-47, 09-51 and 09-137
)

**COMMENTS – NBP Public Notice #26
of the
ASSOCIATION OF PUBLIC-SAFETY COMMUNICATIONS OFFICIALS-
INTERNATIONAL, INC. (APCO)**

The Association of Public-Safety Communications Officials-International, Inc. (“APCO”) hereby submits the following comments in response to the Commission’s *Public Notice*, DA 09-2518, released December 2, 2009, seeking information regarding spectrum allocated for television broadcasting.

Founded in 1935, APCO is the nation’s oldest and largest public safety communications organization. Most APCO members are state or local government employees who manage and operate communications systems for police, fire, emergency medical, forestry conservation, highway maintenance, disaster relief, and other public safety agencies. APCO is the largest FCC-certified frequency coordinator for Part 90, Public Safety Pool channels, and appears regularly before the Commission on a wide variety of public safety communications issues.

The *Public Notice* mainly concerns television broadcasting. However, it is important to remember that the Commission’s rules also allocate a portion of TV channels 14-20 (470-512 MHz) for public safety and other private land mobile radio communications in eleven of the nation’s largest major metropolitan areas: New York, San Francisco, Los Angeles, Philadelphia,

Boston, Washington, Chicago, Miami, Pittsburgh, Dallas, and Houston.¹ The Commission has also granted numerous waivers allowing additional public safety use of specific 470-512 MHz frequencies or, in some cases, the entire TV channel.² Some waivers also allow use of allocated channels beyond the relevant metropolitan areas.

In New York, Los Angeles and other areas, the 470-512 MHz band has become a principal source of radio spectrum for interoperable public safety communications systems. Some of the nation's largest public safety agencies, such as the New York City Police Department and the Los Angeles County Sheriff's Department, use the band for virtually all of their mobile and portable radio communications. Therefore, any potential reallocation of "television broadcasting spectrum" needs to protect the essential public safety operations in the 470-512 MHz band.

The *Public Notice* also seeks comments on Section 336(f) of the Telecommunications Act of 1996, which required the Commission to conduct an evaluation of the advanced television services (now known as DTV) within 10 years after the date the Commission first issued licenses for such services. Subsection (f) (2), requires that evaluation to include an assessment of "alternative uses, including public safety use, of the spectrum used for advanced television broadcasts."

As noted above, public safety already uses a portion of a spectrum band otherwise allocated for television broadcasting. However, only portions of the band (typically the equivalent of 2-3 television channels) are available for public safety use today, and use is

¹ 47 C.F.R. §90.303. While channels are similarly allocated in Cleveland and Detroit, use of the spectrum in those markets is prevented by Canadian treaty provisions.

² E.g., *County of Los Angeles, California*, DA 08-2823, released December 30, 2008; *Nassau County Police Department*, DA 02-1771, 17 FCC Rcd 14252 (2002).

effectively limited to within 80 miles or less of the center of each of the relevant metropolitan areas.³ These areas face severe spectrum congestion and could benefit greatly from additional capacity for their public safety operations. In many cases the 700 MHz band - cleared as a result of the DTV transition - is insufficient to meet those requirements.⁴ Public safety agencies across the nation, not just in the eleven designated markets, could also benefit from additional spectrum in this band, which is adjacent to a nationwide land mobile radio frequency band (450-470 MHz). Such agencies could also benefit from existing equipment technology designed for use across the 450-512 MHz range.

Finally, we note that the TV channel 7 occupies spectrum (174-180 MHz) which is immediately adjacent to the VHF land mobile spectrum used by public safety agencies and other land mobile radio licensees across the nation. The band is especially popular in sparsely populated areas and mountainous regions because of excellent propagation characteristics that allow a small number of base stations to cover large land areas (the 700 MHz band would be impractical to deploy in many of these areas because of the huge number of transmitter sites necessary to provide coverage). The relatively low cost of VHF equipment also makes it popular with small public safety agencies, especially volunteer fire department across the nation (fire services in general like the band because of its in-building capabilities).

Unfortunately, the VHF land mobile radio band is extremely congested, and even rural areas have in many cases run out of available channels. The lack of channel pairing in the band also limits the ability to implement spectrum-efficient trunking technologies. A new adjacent

³ Base stations must be within 50 miles of the geographic center of the metropolitan area, and mobile use is restricted to within 30 miles of base stations. 47 C.F.R. §90.305.

⁴ See *County of Los Angeles, California*, DA 08-2823, released December 30, 2008. There are not enough narrowband channels in 700 MHz to meet the demand in many major metropolitan areas, and using 700 MHz would in some cases require wholesale replacement of existing radio systems.

block of channels (*e.g.*, in 174-180 MHz) could provide the necessary channel-pairing, provide greenspace to facilitate better “refarming” of existing channels, and greatly increase public safety communications capabilities in many parts of the nation.

APCO is well aware of the difficulties of reallocating broadcast spectrum, is not today advocating such reallocation, and offers no judgment at this time regarding the current use of that spectrum by television broadcasters. Nevertheless, as the Commission conducts far-reaching planning for the television broadcast spectrum, it should take into consideration both the need to protect existing public safety use in the 470-512 MHz band, and the need for additional public safety spectrum in, or adjacent to, bands already used for public safety communications.

Respectfully submitted,

/s/

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