

## COMMENTS OF APCO INTERNATIONAL

The Association of Public-Safety Communications Officials-International, Inc. (APCO)<sup>1</sup> submits the following comments in response to NTIA's request for information regarding the development of a national spectrum strategy.<sup>2</sup> APCO appreciates the opportunity to provide a public safety perspective on spectrum. At the President's direction, NTIA must take into account factors such as "critical safety and security concerns" in developing a sustainable, long-term spectrum strategy.<sup>3</sup> Below, APCO briefly describes public safety's unique need for reliable, interference-free access to spectrum and the potential implications for spectrum policies and strategies.

Public safety depends on spectrum for communications to protect life and property. For example, public safety agencies use spectrum to dispatch first responders, share incident-related data such as suspect descriptions and scene-safety information essential to law enforcement, fire, and EMS officials, support public safety communications among first responders, declare MAYDAYs for responders in life-threatening danger, and provide critical backup links for 9-1-1 networks. Any spectrum strategies or policies must respect the life-or-death nature of these communications and preserve public safety's need for reliable, interference-free access to spectrum.<sup>4</sup>

As NTIA develops a national spectrum strategy, particularly with regard to opportunities to reallocate spectrum, it must recognize that evaluations of efficiency and effectiveness for public safety may differ from other types of spectrum users such as business and for-profit commercial licensees. Public safety communications systems are designed for the worst-case, highest-use scenario and therefore may require a much greater surge capacity than commercial systems. Additionally, mechanisms such as reverse spectrum auctions intended to increase efficiency for commercial spectrum use are not well-suited to incumbent public safety licensees. Public safety agencies require sufficient spectrum resources to support their missions, and should not be asked to put a price on responder or public safety in exchange for the prospect of incentive payments.<sup>5</sup> Furthermore, public safety's various

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<sup>1</sup> 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 31,000 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. APCO is the only organization that provides public safety agencies with full radio frequency management services, including frequency coordination, engineering, and license preparation and management.

<sup>2</sup> Developing a Sustainable Spectrum Strategy for America's Future, 83 Fed. Reg. 65640-41 (Dec. 21, 2018) ("Notice"), available at <https://www.federalregister.gov/documents/2018/12/21/2018-27690/developing-a-sustainable-spectrum-strategy-for-americas-future#footnote-1-p65640>.

<sup>3</sup> Memorandum for the Heads of Executive Departments and Agencies, Developing a Sustainable Spectrum Strategy for America's Future, 83 Fed. Reg. 54513 (Oct. 30, 2018) ("Memorandum"), available at <https://www.federalregister.gov/documents/2018/10/30/2018-23839/developing-a-sustainable-spectrum-strategy-for-americas-future>.

<sup>4</sup> As an example of a policy that recognizes public's safety's unique needs, the Federal Communications Commission's radio licensing rules generally require a frequency coordination process, which entails a complex technical review to determine the compatibility of frequencies used in the relevant geographical area, to ensure that public safety officials have reliable and interference-free communications capabilities.

<sup>5</sup> The Presidential Memorandum states that "the Nation can and will ensure security and safety through modern technology." Memorandum at 54513. To the extent that the National Spectrum Strategy results in spectrum auctions or otherwise generates revenue, APCO encourages NTIA and other stakeholders to consider the need to

communications needs may be uniquely served by specific spectrum bands without sufficient alternatives.<sup>6</sup>

With regard to modern spectrum sharing techniques, APCO is open to a sharing approach so long as public safety users retain interference-free, reliable access to spectrum. Sharing has the potential to promote the efficient use of spectrum and create opportunities for incumbents and new entrants alike. Expanding the use of spectrum bands can also encourage new and existing equipment manufacturers to innovate and expand the device ecosystem. However, any sharing techniques must be tested and proven to be effective at protecting public safety's use of the band before being put to use. Public safety communications must not be placed at risk by new, unproven spectrum sharing methods. As an additional precaution, the introduction of spectrum sharing techniques that could impact public safety communications should be accompanied by mechanisms to help public safety rapidly identify and resolve potential sources of interference.

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fund Next Generation 9-1-1 from these proceeds. Approximately 80% of calls for emergency assistance placed to 9-1-1 are from wireless devices using commercial spectrum. Significant funding is needed to modernize the nation's 9-1-1 networks, which are the most critical of critical infrastructure.

<sup>6</sup> For example, the 6 GHz band is the only frequency band suitable for long-haul microwave transmissions for public safety, and the 4.9 GHz band is the only band available to public safety for localized, bandwidth-intensive applications for mission critical use cases.