

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

In the Matter of)	
)	
Unlicensed Use of the 6 GHz Band)	ET Docket No. 18-295
)	
Expanding Flexible Use in Mid-Band Spectrum)	GN Docket No. 17-183
Between 3.7 and 24 GHz)	

PETITION FOR STAY OF APCO INTERNATIONAL

The Association of Public-Safety Communications Officials-International, Inc. (APCO),¹ pursuant to Sections 1.41, 1.43, 1.44(e), and 1.429(k) of the Commission’s rules, respectfully requests that the Commission stay the rules adopted on April 23, 2020, in the above-captioned proceeding,² pending resolution of the Petition for Reconsideration filed by APCO.³

I. Introduction

Concurrent with this Petition for Stay, APCO has filed a Petition for Reconsideration urging the Commission to vacate the rules expanding unlicensed use of the 6 GHz band because the Order introduces a substantial threat to public safety.

If the rules move forward uncorrected, public safety will suffer irreparable harm. Ensuring that public safety communications are reliable requires the ability to prevent interference and quickly mitigate interference should it occur. However, the Commission failed to consider public safety, did not adopt effective methods to prevent interference to mission

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 35,000 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.

² Unlicensed Use of the 6 GHz Band, Expanding Flexible Use in Mid-Band Spectrum Between 3.7 and 24 GHz, ET Docket No. 18-295, GN Docket No. 17-183, *Report and Order and Further Notice of Proposed Rulemaking*, FCC 20-51 (rel. Apr. 24, 2020) (“Order”).

³ APCO International Petition for Reconsideration, ET Docket No. 18-295, GN Docket No. 17-183 (filed May 28, 2020) (“Petition for Reconsideration”).

critical communications, and did not require a mechanism to promptly identify and eliminate interference. Following the effective date of the rules, an influx of unlicensed devices – expected to grow on the order of hundreds of millions – will be introduced for use on the same spectrum used by public safety. Protecting public safety communications will be more difficult every day that the rules are in effect, and eliminating problematic devices after they have begun operating will be nearly impossible. Accordingly, the Commission must stay the rules until it has reconsidered the impacts on public safety and established mechanisms to effectively prevent and promptly eliminate interference to public safety communications.

II. Discussion

Section 1.429(k) of the Commission’s rules permits the Commission to stay the effective date of a rule pending a decision on a Petition for Reconsideration. To qualify for a stay, a petitioner must show that: (1) it is likely to prevail on the merits; (2) it will suffer irreparable harm absent the grant of preliminary relief; (3) other interested parties will not be harmed if the stay is granted; and (4) the public interest favors grant of the stay.⁴ As explained below, each of these criteria is met with regard to APCO’s Petition for Reconsideration, which is incorporated herein by reference.

a. The Case for Reconsideration to Protect Public Safety Is Likely to Prevail on the Merits

As the D.C. Circuit Court of Appeals has noted, the Commission is “required to consider public safety by... its enabling act.”⁵ A “statutorily mandated factor, by definition, is an

⁴ See Protecting the Privacy of Customers of Broadband and Other Telecommunications Services, WC Docket No. 16-106, *Order Granting Stay Petition in Part*, FCC 17-19 (rel. Mar. 1, 2017) (citing *Washington Metro. Area Transit Comm’n v. Holiday Tours, Inc.*, 559 F.2d 841, 843 (D.C. Cir. 1977) (“*Holiday Tours*”); *Virginia Petroleum Jobbers Ass’n v. Federal Power Comm’n*, 259 F.2d 921, 925 (D.C. Cir. 1958) (“*VA Petroleum Jobbers*”)).

⁵ *Mozilla Corp. v. FCC*, 940 F.3d 1, 93 (D.C. Cir. 2019) (“*Mozilla*”) (citing *Nuvio Corp. v. FCC*, 473 F.3d 302, 307 (D.C. Cir. 2006)). See also 47 U.S.C. § 151.

important aspect of any issue before an administrative agency.”⁶ “An agency’s failure to consider and address during rulemaking ‘an important aspect of the problem’ renders its decision arbitrary and capricious.”⁷

As explained below and in greater detail in APCO’s Petition for Reconsideration, the Commission failed to consider how the rules will impact public safety and did not adequately address public safety’s concerns. Further, the rules are lacking measures that are necessary for the Commission’s spectrum sharing framework to be successful.

i. The Commission Failed to Consider Public Safety

The failure to appropriately consider public safety likely renders the Commission’s decision arbitrary and capricious⁸ and constitutes reversible error.⁹ The Order does not reflect appropriate consideration for public’s safety’s reliance on the 6 GHz band for mission critical communications and the potential for interference to result in irreparable harm to the public’s and first responders’ safety. APCO raised numerous concerns in its initial comments and a detailed ex parte letter filed after the draft Order was released.¹⁰ Yet, the Commission adopted a final Order without addressing many serious shortcomings and failed to even acknowledge APCO’s ex parte filing and other cautions on the record from the public safety community.¹¹

As APCO pointed out, expanding unlicensed use of the band will result in interference to incumbent users, including public safety. Interference is a statistical certainty given the sheer

⁶ *Id.* at 94 (quoting *Public Citizen v. Federal Motor Carrier Safety Admin.*, 374 F.3d 1209, 1216 (D.C. Cir. 2004)).

⁷ *Id.* (quoting *Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983)).

⁸ *See id.*

⁹ *Id.* at 100 (stating that with regard to the Commission’s Restoring Internet Freedom Order “The Commission’s disregard of its duty to analyze the impact of the 2018 Order on public safety renders its decision arbitrary and capricious in that part and warrants a remand with direction to address the issues raised.”).

¹⁰ Letter from Jeffrey S. Cohen, Chief Counsel, APCO International, to Marlene H. Dortch, Secretary, Federal Communications Commission, ET Docket No. 18-295, GN Docket No. 17-183 (Apr. 10, 2020).

¹¹ Letter from Kimberly J. Wagner, Executive Director, Major County Sheriffs of America, to Marlene H. Dortch, Secretary, Federal Communications Commission, ET Docket No. 18-295, GN Docket No. 17-183 (Apr. 16, 2020).

number of unlicensed devices expected to operate in a band that is already heavily used. Other than acknowledging that incumbent use includes public safety communications, the Order ignores public's safety issues. The Order even neglects to acknowledge the impact of interference to public safety as part of the cost/benefit analysis.¹²

ii. The Rules Lack Necessary Measures for the Unlicensed Spectrum Sharing Approach to Work

The ability to prevent interference from standard power access points depends on an automated frequency coordination (AFC) system's ability to define exclusion zones that restrict unlicensed transmissions in locations that could interfere with incumbent users. While there has been debate over how to define exclusion zones,¹³ there is no doubt that they will be wholly ineffective if the AFC does not know where standard power access points are. However, the Order neglects to establish location accuracy requirements for these devices and merely requires coordinates to be reported with a 95% confidence level.¹⁴ This sets a requirement for how estimated locations should be described to an AFC, not a requirement for how close the estimate must be to the true location. Of the millions of standard power access points expected to be deployed, one in twenty could be installed in the worst possible location for a public safety microwave receiver and authorized by an AFC to operate at full power on the same channel being used by public safety.

Fixing the problem with location requirements so that an AFC is able to perform as intended will not cure the flaws in the Commission's approach to preventing interference. The

¹² See Order paras. 229-30. As further evidence of neglecting appropriate consideration for public safety, the Order overlooks the need to protect public safety links operating under an emergency Special Temporary Authority (STA). As APCO pointed out, STAs are an important use of the band for public safety, particularly in the wake of major disasters. Petition for Reconsideration at 5.

¹³ See Order para. 62.

¹⁴ *Id.* para. 41.

Commission should extend the AFC requirement to low power devices. Instead the rules permit low power access points to operate without coordination by an AFC system, in part based on an assumption that limiting these devices to indoor operation decreases their likelihood of interfering with incumbent users. However, the Order did not include sufficient measures to ensure low power access points are restricted to indoor operation only. Further, by permitting low power access points to operate on the same frequencies as standard power access points, it will be impossible to determine if an AFC is effective at preventing interference from standard power access points.

In addition to overlooking public safety's concerns that the rules will not prevent interference, the Order failed to address how sources of interference will be identified and eliminated.¹⁵ When interference occurs, the only information available to public safety agencies will be that the microwave link has stopped providing the mission critical communications it was designed for. Public safety fixed service systems are not designed to detect interference and are incapable of attributing it to a particular source. Attempting to identify the source(s) of interference is a long, expensive process – particularly when dealing with unlicensed devices – and many questions remain regarding how to promptly eliminate interference after the source has been identified. Despite this being one of the most important issues for public safety, the Order establishes no requirement to ensure interference can be quickly identified and eliminated. Instead, the Order encourages – but does not require – the industry to convene a group of

¹⁵ The lack of a process cannot be attributed to a lack of suggestions. For example, APCO pointed out that AFCs could maintain (and share with one another) records of the transmissions and frequencies used by standard power access points. Then, public safety agencies could provide logs of disruptions that the AFCs could compare to their own records to check for correlations with unlicensed transmissions. *See* Comments of APCO 9, 19. Under the Order, however, this will not be feasible because neither AFCs nor devices will be required to keep the records necessary for this process. In any event, this approach would not by itself be an adequate mechanism for quickly resolving interference. This overlooked suggestion is an example of the Order's failure to consider mechanisms for quickly resolving interference.

interested stakeholders to address interference detection and mitigation as part of a slate of other topics.¹⁶ For the Citizens Broadband Radio Service cited so frequently as a model for the 6 GHz spectrum sharing approach, the Commission at least established a token requirement for an AFC to demonstrate the ability to promptly respond to complaints.¹⁷ The lack of at least a comparable measure for protecting life-safety communications in the 6 GHz band demonstrates a clear error.

b. Stay of the Order is Necessary to Avoid Irreparable Harm

If the Commission's rules take effect without significant changes, APCO's members and the communities and first responders they are dedicated to serving will face irreparable harm. As the D.C. Circuit Court of Appeals has explained, "whenever public safety is involved, lives are at stake," and the potential harms "during a public safety emergency are irreparable."¹⁸

Public safety agencies use the 6 GHz band for mission critical systems that support operational needs such as dispatching first responders and maintaining voice communications during incidents. Disruption to these systems could have dire consequences. Assistance to the public could be delayed. Law enforcement officers, emergency medical technicians, and firefighters might lack the ability to transmit emergency calls for assistance and other information essential for protecting life and property.

Expanding unlicensed use of the band as permitted by the Order will result in interference to incumbent users, a fact recognized by the Commission.¹⁹ The sheer number of unlicensed

¹⁶ Order paras. 174-80.

¹⁷ See 47 CFR 96.53(o). Note that in the CBRS, an automated frequency coordination system is referred to as a spectrum access system.

¹⁸ *Mozilla* at 98.

¹⁹ See Order para. 176 ("We encourage the multi-stakeholder group to address any issues it deems appropriate regarding interference detection and mitigation in the event that an incumbent licensee believes it may be experiencing harmful interference from standard-power or indoor low-power operations. These issues would include procedures and processes that could be followed if an incumbent licensee has, or potentially has, an interference complaint."). See also *id.* para 230 ("As explained above, the technical and operational rules are designed to minimize the potential interference to incumbent licensed uses.").

devices expected to operate in a band that is already heavily used makes interference a statistical certainty. Products are already being marketed that will take advantage of the new rules, and the influx of devices could be significant following the effective date of the rules.²⁰ The harm to public safety and difficulty reversing course on the Order will increase every day that the rules are in effect.

Absent a stay of the Order to cure its defects, public safety agencies will have to engage in resource-intensive and expensive processes to attempt to identify the source(s) of interference. There is nothing fast about this process.²¹ Public safety microwave links typically span twenty-five to thirty-five miles, and as much as fifty miles, and therefore could be impacted by transmissions within a very large geographic area. Thousands of apartment buildings, businesses, schools, and houses might hold the source of interference. Given the “sporadic and bursty nature of Wi-Fi transmissions,” as the Commission describes them,²² and the fact that devices will be growing in vast numbers and changing the frequencies they’re using, it might not even be possible for public safety agencies to readily identify the source(s) of interference. Meanwhile, the public safety agency may have few if any options to turn to as alternatives for its mission critical communications needs. As this process drags on, without certainty of how long it will take or whether the result will be a termination of interference, public safety will suffer irreparable harm.

c. Other Parties Will Not Be Harmed If the Stay Is Granted

²⁰ Ry Crist, *Broadcom jumps in with Wi-Fi 6E chipsets for better, more capable routers*, CNET News (Jan. 7, 2020), <https://www.cnet.com/news/broadcom-jumps-in-with-wi-fi-6e-chipsets-for-better-more-capable-routers/>.

²¹ Just recently the Commission proposed forfeitures upon wireless internet service providers for interference caused by unauthorized use of U-NII devices that “could be potentially life threatening.” This was only after an exhaustive, labor- and time-consuming process to identify and eliminate the interfering source. *See* Buzzer Net LLC San Juan, Puerto Rico, *Notice of Apparent Liability for Forfeiture and Order*, DA 20-439, (rel. Apr. 22, 2020); *see also* WiFi Services Caribbean, Inc San Juan, Puerto Rico, *Notice of Apparent Liability for Forfeiture and Order*, DA 20-433 (rel. Apr. 22, 2020).

²² Order para. 142.

Suspending the effective date of the Order will not harm other parties. Granting the stay would mean maintaining the status quo that has been in place for several decades, and the Order was not intended to end an existing harm.²³

APCO's Petition for Reconsideration reiterates concerns that were raised prior to adoption of the Commission's Order. No party challenged these concerns on the record or indicated that it would face harm if the Commission delayed the Order to resolve these concerns. APCO is not aware of reports that parties are suffering harm as a result of unlicensed devices lacking sufficient bandwidth, despite an unprecedented nationwide emergency causing a significant shift in usage of Wi-Fi. In contrast, public safety agencies across the country depend on the 6 GHz band, and they are stretched to their limits responding to the COVID-19 pandemic.

d. Granting a Stay to Allow the Commission to Correct Deficiencies in Its Rules Is in the Public Interest

Given the Commission's statutory mandate to promote public safety,²⁴ protecting public safety communications is clearly in the public interest. It is in the public interest for first responders to have reliable communications. Protecting public safety communications will not be possible without suspending the expansion of unlicensed devices into the 6 GHz band so that the Commission can revise its rules to ensure the spectrum sharing approach includes appropriate measures to prevent and promptly mitigate interference. Given the potential for irreversible harm, grant of a stay to halt implementation of an inadequate spectrum sharing framework for the sake of protecting public safety is in the public interest.

III. Conclusion

²³ See *id.* para. 2, describing the Commission's goal of increasing spectrum available for Wi-Fi so that businesses and consumers will be able to take advantage of new data intensive applications.

²⁴ One of the Commission's primary objectives is to "make available, so far as possible, to all people of the United States ... a ... wire and radio communication service . . . for the purpose of promoting safety of life and property." 47 U.S.C. § 151.

For the foregoing reasons, the Commission should stay the rules adopted in the Order, pending final resolution of APCO's Petition for Reconsideration of the Order.

Respectfully submitted,

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