

**Before the
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554**

In the Matter of)	
)	
Promoting Investment in the 3550-3700 MHz)	GN Docket No. 17-258
Band)	
)	

COMMENTS OF THE CITY OF NEW YORK

I. Introduction

The New York City Mayor’s Office of the Chief Technology Officer submits these comments on behalf of the City of New York (the “City”) in connection with the proceeding listed above.¹ The City appreciates the opportunity to comment on the Federal Communications Commission’s (the “Commission”) efforts to foster investment in 5G networks in the 3550 MHz band. The City has an interest both on behalf of all residents, businesses and visitors, and also as a major consumer of wireless services.

The City believes the current framework of three-year licenses covering census tracts will most effectively spur investment in 5G networks while encouraging universal access to those advanced services. The City does not believe the Commission’s proposals, especially regarding increasing the geographic areas of Priority Access Licenses (PALs), will achieve the desired result. The City asks that the Commission strengthen its current PAL regime by instituting strong performance requirements and encouraging a robust secondary market, while maintaining the current three-year licenses at the census tract level. Competition, resulting in greater coverage and speed, as well as lower prices for consumers, will be better fostered by a licensing regime that enables all actors, including smaller providers and new types of operators, to take part in building 5G networks, and that holds all actors to the commitment they make to the public by obtaining a license.

II. License Terms Should Be Short & Renewal Contingent on Compliance with Performance Requirements

The City believes ten-year long licenses will price all but the largest cellular service providers out of the PAL market and will risk leaving already underserved communities without the benefits of 5G if license holders in their area do not invest locally—a problem exacerbated by the Commission’s proposal to increase PAL geographic areas from census tracts to Partial Economic Areas (PEAs). The City sees no reason to believe that longer license terms will encourage providers to re-invest their returns in the license area, and particularly not invest in areas initially overlooked for 5G buildout. The Commission should maintain the current framework of three-year license terms.

¹ Promoting Investment in the 3550-3700 MHz Band, Notice of Proposed Rulemaking and Order Terminating Petitions, 82 FR 56193 (Nov. 28, 2017) (*hereinafter* “NPRM”).

License holders have a business incentive to invest first in areas most likely to provide a return on their investment. Later investments will have to be in either those same areas, where diminishing returns are likely expected (both on licensees' return and in increased quality of service for users), or in areas already determined to be less financially attractive to license holders. There is little reason to think that longer terms will entice license holders to invest in areas they predict little chance of making money in, especially given that those investments would happen, if at all, years after the license was granted and initial investments were completed. In the absence of enforceable performance requirements, the operator would have an incentive to both invest in limited areas and to leave equipment in operation for as long as possible, likely beyond the optimal refresh period from the consumer's standpoint. Such aging infrastructure and equipment could lead to disparate impacts on communities, particularly in the event of a natural disaster or other emergency. The resulting disparities within a license area would be invisible to consumers, without up-to-date, transparent reporting, yet everyone living and working in the area would be charged the same.

To mitigate this concern, the Commission should decline to lengthen terms beyond three years, in addition to implementing the measures discussed later in this comment. The Commission noted that ten-year renewable licenses would harmonize this band with other bands.² However, the Commission's mandate is not to harmonize license terms, but to identify the right terms for this particular band to spur investment and ensure universal access to high-speed broadband services. Licenses longer than three years create too great a risk that already underserved communities will be left behind, with no recourse but to wait a decade to see if the license will be awarded to another entity, who may still not invest in certain communities. Further, the City does not believe that selling multiple licenses in each geographic area, or allowing opportunistic General Authorized Access (GAA) use will mitigate that risk. To the contrary, history shows that communities can be under-invested in by multiple telecommunications providers simultaneously, while other, often more affluent communities are flush with choice and see far higher speeds and quality of service.³

Three-year license terms will lessen the gap that could form if certain communities are under-invested in. Such terms, paired with licenses covering small geographic areas, strong performance requirements, robust secondary markets, and no presumption of renewal will ensure that smaller entities will be able to serve areas traditionally ignored by major players in the telecommunications industry, rather than being kept out by spectrum hoarding or by licenses that are too big for all but the largest players to afford. The City urges the Commission to maintain the consensus decision of three-year license terms.

III. Geographic License Areas Should Stay at The Census Tract Level

Petitioners suggest expanding the geographic area for each PAL to PEAs, arguing that smaller PALs, licensed at the census tract level, would be too much of a challenge to manage.⁴ The City strongly opposes such a change and urges the Commission to maintain the current consensus framework. Expanding PALs to cover areas as large as PEAs would discourage investment by smaller entities,

² NPRM ¶ 17.

³ See, Casey Williams, *The Depressing Truth About Bad Cell Phone Service*, The Huffington Post (May 3, 2016) https://www.huffingtonpost.com/entry/truth-about-bad-cell-phone-service_us_5727a5f7e4b01a5ebde648f7 (discussing a study showing that low-income areas have "15 percent less coverage than wealthier regions").

⁴ NPRM ¶ 20.

especially when combined with the other proposed changes to PALs outlined in the NPRM. Instead, the Commission should maintain the current census-tract sized license areas.

As the Commission noted, two Spectrum Access System (SAS) Administrators argue that licensing PALs in each census block “would not pose an undue burden ‘given the meaningful advances in database management, cloud computing, and other technologies and engineering systems in recent years.’”⁵ The City agrees with these statements of SAS Administrators, given their experience and knowledge managing such databases. This presents a more open path for investment from a much wider variety of potential investors: an operator, an anchor institution or business, or a local government or tribal authority, for example.

Smaller license areas will make for more efficient use of spectrum. They help ensure that licenses will be held only by providers who intend to use them in particular areas, while providers may obtain licenses to PEAs merely to obtain access to particular communities inside them; people inside a given PEA but outside the communities focused for investment would have to rely on potential secondary markets and as-yet-undetermined performance requirements to ensure they get any sort of service in the 3550 MHz band. Smaller license areas will mitigate the risk that spectrum will be hoarded by structuring a market friendly to smaller entities that will increase competitive pressures. The City urges the Commission to keep license areas small and to offer PALs at the census tract level.

IV. Performance Requirements

Strong performance requirements are necessary if the Commission is to ensure that communities will not be left behind by under-investment by license holders. Performance requirements should be structured to ensure individual communities inside such areas are not overlooked.

The Commission should measure a wide range of coverage and quality metrics to ensure that the spectrum is put to its best use and only renew licenses if the licensee provided appropriate levels of service. It should measure geographic coverage, requiring a high percentage of coverage at a granular measurement level, to ensure wide swaths of license areas are not left behind without 5G service. It should collect propagation models based on standardized measures, measure upload and download speeds using on-the-ground data, and determine uptime and time to restoration after service outages, requiring high-performance on all metrics if a license is to be renewed. The Commission already collects much of this sort of data in its Form 477 data collection, and the City has previously commented on how that collection could be made more useful to consumers and to policymakers.⁶ Additional requirements on resiliency and service restoration, particularly after severe weather events, are critical in determining whether a license should be renewed. As consumers shift to wireless-only services to take advantage of the predicted high speeds and reliability of 5G,⁷ such reliance is likely to increase. 5G may very well be the future of internet access. It is not enough that 5G standards should

⁵ NPRM ¶ 21 (*citing* Google Comments at 24; Vivint Wireless Reply Comments at 3; Sony Comments at 1-2; DSA Comments at 10.).

⁶ Reply Comments of the City of New York, *Modernizing the FCC Form 477 Data Program*, WC Docket No. 11-10 (Oct. 24, 2017).

⁷ The Pew Research Center estimates that 12% of American adults rely solely on smartphones for internet access; CTIA estimates that 49% of American households are wireless-only. *See, Mobile Fact Sheet*, Pew Research Center (January 12, 2017) <http://www.pewinternet.org/fact-sheet/mobile/>; and *Wireless Quick Facts*, CTIA (last visited Dec. 28, 2017) <https://ctia.org/industry-data/wireless-quick-facts>.

be successful, or that some privileged communities achieve high, 5G speeds; the goal must always be universal coverage.

V. Secondary Markets

The City believes the Commission should adopt policies that encourage a thriving secondary market, particularly if it chooses to issue PALs for areas larger than census tracts. Encouraging the sale of licenses on a secondary market will help ensure that smaller entities with a plan to serve a small area—say, a particular community, a stadium, or a shopping district—will be able to invest locally in places where bigger players may not see a large enough return on investment to make the effort worthwhile.

Partitioning and disaggregation of PALs in secondary market transactions would increase efficiency and, when paired with policies that encourage robustness in such a market, such as strong performance requirements, will help ensure uniform buildout for all users. The Commission should allow PAL holders to partition and disaggregate their licenses at particularly granular levels to maximize business opportunities to sustain high quality service levels across the entire license area.

VI. SAS Public Disclosure

The City believes that current rules requiring disclosure of Citizen Broadband Service Device (CBSD) information, including geolocation, signal level, and frequency,⁸ should be preserved. The City rejects the suggestion that there is competitively sensitive information deserving of protection at issue here. As the City has argued in the past,⁹ disclosure of information by all providers in a market poses no asymmetrical risk to any provider, and serves to increase competition and consumer confidence. As the Commission's goal is to increase competition,¹⁰ and petitioners believe that release of CBSD information would increase competitive pressure on providers,¹¹ the Commission should maintain current rules requiring disclosure. These disclosures also benefit possible entrants to the market who need the information to explore the feasibility of deploying service.¹² In this regard, disclosure of this information would serve to aid the Commission's efforts to both increase competition and create a thriving secondary market in PALs.

VII. Conclusion

The City welcomes the opportunity to comment in this docket, and urges the Commission to maintain the current framework for the 3550 MHz band. The City believes the current consensus framework of issuing PALs for three-year terms for census tracts is balanced and well-tailored to achieve the goals of greater competition and expanded access to service. The Commission should build on that

⁸ 47 CFR §§ 96.55, 96.39, & 96.45 (requiring the submission of specified data to SAS Administrators and the release of that information to the general public by SAS Administrators after obfuscation of licensee identities).

⁹ Reply Comments of the City of New York, *Modernizing the FCC Form 477 Data Program*, WC Docket No. 11-10 (Oct. 24, 2017).

¹⁰ See, e.g., NPRM ¶¶ 19 & 42 (asking whether proposed changes would promote competition and, in ¶ 42, noting the “statutory objectives of Section 309(j), including to ‘promot[e] economic opportunity and competition . . .’”).

¹¹ NPRM ¶ 34 (Petitioners assert that the rule raises . . . competitive concerns . . .).

¹² NPRM ¶ 35 (*citing* Google Comments at 29; OTI/PK Comments at 32 (stating that CTIA and T-Mobile are “seeking secrecy as a backdoor means of undermining more efficient and intensive use of the entire [Citizens Broadband Radio Service] band”)); WISPA Comments at 31.

framework by adopting strong performance requirements and encouraging secondary markets, helping to ensure efficient use of spectrum and universal coverage.

Respectfully,

/s/_____

THE CITY OF NEW YORK

December 28, 2017