Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of Amendment of the Commission’s Rules with Regard to Commercial Operations in the 3550-3650 MHz Band

VERIZON COMMENTS ON FURTHER NOTICE OF PROPOSED RULEMAKING

The Commission should establish rules for Priority Access Licenses (“PALs”) that promote investment and innovation in the nascent 3.5 GHz band. The Commission can help do that in two ways. First, it should adopt rules ensuring that each PAL holder can define the contours of its service area where its operations receive protection from harmful interference, leaving the rest of its license area available for opportunistic use by General Authorized Access (“GAA”) users. Second, it should promote a robust, efficient secondary market by forbearing from case-by-case review and prior approval of PAL transfers and leasing arrangements.

A. The Commission Should Permit PAL Holders To Define the Contours of Their Service Areas Needing Protection from Harmful Interference.

The best way to ensure that PALs convey quality of service assurances, which will promote robust investment, is to allow each PAL holder to directly input into the Spectrum Access System (“SAS”) database the coverage contours that require protection from GAA operations. Honoring each PAL holder’s specific need for interference protections is essential to
PALs’ policy purpose, which is to promote intensive use of 3.5 GHz spectrum by providing operators with meaningful quality of service assurances.¹

The goal of promoting intensive use of PAL licenses would be undercut if the Commission were to authorize third-party SASs to impose engineering assumptions on PAL operators about their needs for interference protections.² Google and others ask the Commission to endorse a set of assumptions about PAL operators’ interference needs, which the SAS would apply to define the areas where GAA operators are excluded.³ But it is impossible for any third party to divine—and design interference protections that respect—each PAL operator’s specific use case and the network configuration it has implemented to achieve the quality of service it seeks. While some operators might deploy cells that conform to the engineering assumptions embedded in these proposals, a third party cannot know what protections an operator needs, including if it is using spectrum as a guard band or as a reserve channel for occasional periods of peak demand.⁴ Imposing a generic definition of “use” would permit GAA operations to cause harmful interference to some PAL operations, which would reduce operators’ willingness to make substantial investments to deploy PAL spectrum.

The Commission has ways to ensure that PAL holders will not claim protection boundaries that are too wide. The Commission could require that each PAL holder certify that the protection boundaries it inputs are for already-constructed sites. It can also monitor the data provided to ensure that no PAL holder seeks protections for unreasonably large portions of its

² FNPRM, ¶¶ 420-21.
service territory. But in doing so, the Commission must recognize that a PAL licensee may be legitimately using a channel even if it is not actively operating on it, such as the guard band and reserve channel uses described above. Since it cannot know how a PAL fits into an operator’s network management strategy, the Commission should establish a rebuttable presumption that the contours certified by each PAL holder are valid.5

B. Forbearance from Review and Prior Approval of PAL Transfers and Leases Would Spur Investment and Innovation in the 3.5 GHz Band.

The Commission should forbear from a case-by-case review and prior approval of PAL transfers and leases under Section 310(d) because the public interest benefits of liberal transferability—ensuring that the spectrum is efficiently dedicated to its highest and best use—far outweigh the remote risk of any harm. The Commission should take advantage of the databases already inherent in the sharing framework to efficiently monitor PAL transfers and leases, stepping in and reviewing them only if it identifies public interest concerns. Given the potentially vast number of transactions involving census tract-sized PALs, a streamlined approach to PAL transfers would also reduce the Commission’s administrative burdens. And it would facilitate the development of innovative spectrum exchanges where PALs trade efficiently on a real-time basis, which would amplify the proven benefits of secondary market transactions.

5 The FNPRM questions whether a PAL holder deploying a Category B (outdoor) small cell can have a legitimate need to exclude Category A operations (which are lower-power and are indoors, or outdoors with limited antenna heights) from spectrum the PAL operator is using as a guard band within the boundaries of its cell site. FNPRM, ¶ 422. The answer is yes. Indoor Category A cells would present less risk than outdoor ones, but the RF attenuation created by a building wall will often provide inadequate interference protections for a PAL operator engineering its network to achieve a contiguous, uniform coverage area (which will often be the PAL use case). That is particularly true near the edge of the PAL operator’s cell, and near the wall itself, especially if the user is near a window. Because of the substantial variability of RF coverage in high clutter areas, operators requiring certain quality of service within the contours of its cell site would often create separations (dedicating a channel as a guard band or creating guard spaces) to protect from such interference. The Commission should not second-guess those engineering decisions.
Companies are less likely to acquire licenses, and to experiment with new innovative ways to put spectrum to use, if they feel uncertain about whether they can later sell or lease their spectrum if their business plans change. That is particularly true with PAL licenses because it is unclear what business or technical paradigms will emerge in this nascent band under this new sharing framework. A dynamic, efficient secondary market for PALs will spur innovation and investment by ensuring that operators can obtain PALs when and where they need quality of service assurances, and also divest PALs quickly and easily if they determine they do not require them.

The tools needed to support a robust secondary market will be present as soon as the sharing regime is in place. The rules already require SAS databases to keep track, on a real-time basis, not only of each PAL in all 74,000 census tracts, but also every PAL user’s specific operations within its service territory, every GAA user’s location anywhere in the country, and the shifting locations of incumbents’ operations. The same sophisticated databases can also keep track of (and report to the Commission) changes in PAL ownership. Database administrators can also easily report transactions to the Commission and the public, and enforce the 40 MHz spectrum aggregation cap for PAL licenses.

The Commission should permit, and encourage, database administrators to establish spectrum exchanges facilitating the efficient buying, selling, and leasing, in real time, of PAL licenses. The Commission correctly notes that one or more spectrum exchanges could “facilitate a vibrant and deep market for PAL rights.” The know-how and technology for promptly implementing a spectrum exchange for 3.5 GHz spectrum exists.

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6 FNPRM, ¶ 431.
7 See, e.g., Comments of Cantor Telecom Services, L.P., GN Docket 12-354 (July 14, 2014).
In similar contexts where streamlined transfer procedures are in the public interest, the Commission has invoked its authority under Section 10(c) of the Act to forbear from individual review of transfers under Section 310(d). For example, in eliminating the requirement of prior approval for pro forma transfers of commercial mobile service licenses, the Commission determined that streamlined procedures would “promote competition” and “eliminate a significant and unnecessary expenditure of carrier and Commission resources.” Streamlined PAL transferability in the 3.5 GHz band would similarly enhance competition and reduce administrative costs, given the potentially hundreds of thousands of PALs to be issued.

Of course, the Commission could monitor PAL transfers and leases, and would retain the ability to step in and review any transaction raising public interest concerns—just as it can (and occasionally does) for pro forma transfers of commercial mobile licenses. But the risk that a PAL transfer might cause competitive harm is remote, especially given the spectrum cap the Commission has imposed on PAL ownership and the “use it or share it” framework for PAL spectrum, which effectively eliminate any theoretical foreclosure risk. The Commission should seize this opportunity to couple its innovative sharing regime with streamlined secondary market rules that promote new, innovative mechanisms for transferring and leasing spectrum.

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9 Id., ¶¶ 16, 20.
Respectfully submitted,

John T. Scott, III
Christopher D. Oatway
1300 I Street N.W., Suite 400 West
Washington, D.C. 20005
(202) 515-2470

Attorneys for Verizon