

**Before the
Federal Communications Commission
Washington, DC 20554**

In the Matter of)	
)	
Expanding Flexible Use of the 3.7 GHz to)	GN Docket No. 18-122
4.2 GHz Band)	

COMMENTS OF CALIFORNIA INTERNET, L.P. DBA GEOLINKS

California Internet, L.P. DBA GeoLinks (“GeoLinks” or the “Company”) submits these reply comments in response to comments filed on the Notice of Proposed Rulemaking (“NPRM”) released in the aforementioned docket.¹

I. INTRODUCTION

GeoLinks is the fastest growing Internet and phone provider in America and the fastest growing telecom in California. In addition, GeoLinks was recently awarded Connect America Fund Phase II Auction funding to serve 3883 Census Blocks in California and Nevada. The Company has a vested interest in ensuring that the FCC’s policies allow competitive broadband providers to access vital spectrum resources and believes that the 3.7-4.2 GHz band provides opportunity for such access, subject to certain rules and requirements.

II. DISCUSSION

**A. GeoLinks Supports the BAC’s Proposed Solution to Allow Spectrum Access
for Fixed Wireless Providers in the 3.7-4.2 GHz Band**

Millions of Americans lack what is considered, by today’s standards, highspeed broadband access - especially in rural areas. As GeoLinks has previously advocated, sparsely populated rural areas are not well suited for traditional, wired broadband service given the cost to build and deliver a cable/ fiber-based network, often resulting in these areas being left on the

¹ *Expanding Flexible Use of the 3.7 to 4.2 GHz Band, Order and Notice of Proposed Rulemaking*, GN Docket No. 18-122, FCC 18-91 (rel. July 13, 2018) (“NPRM”).

wrong side of the digital divide. However, fixed wireless broadband technology can provide highspeed broadband to consumers in these areas for a fraction of the cost of traditional, wired networks. In addition, fixed wireless providers can (and do in some areas) offer competitive choice to consumers in urban and suburban areas.

Like other fixed wireless providers, GeoLinks' technology platform depends on access to spectrum resources sufficient to support enterprise-level broadband connections. While spectrum resources do exist that have allowed fixed wireless providers to successfully deploy internet services in some areas, these resources have primarily been available on an unlicensed basis only. Unlicensed bands are not a one-size-fits-all option as they are often subject to congestion and interference that can degrade wireless signals.

In order for fixed wireless broadband providers to truly compete with traditional, wired service providers, additional spectrum resources are needed. GeoLinks believes the 3.7-4.2 GHz band offers an opportunity for the Commission to allocate spectrum resources in a way that will promote competition and help bridge the digital divide while protecting current users of the band.

The BAC has set forth a "win-win-win solution that: (1) protects incumbent FCC operators from harmful interference; (2) clears a portion of the band for exclusive flexible use licensing; and (3) enables fixed P2MP broadband providers to deploy badly needed high-throughput broadband to unserved and underserved customers."² GeoLinks believes that this proposed solution strikes the right balance with respect to spectrum sharing, frequency coordination, buildout requirements, and Point-to-Multipoint ("P2MP") deployment. As such, GeoLinks supports the opening comments submitted by the BAC in response to the NPRM.

B. The Commission Should Reject Any Arguments that Fixed Wireless Providers Already Have Access to All the Spectrum Resources They Need

GeoLinks urges the Commission to reject any argument that the spectrum resources that fixed wireless providers have now are "good enough." This status-quo mentality is exemplified in comments that appear to suggest that fixed wireless providers have all the spectrum they need or will get it eventually, so there is no need to look to the 3.7-4.2 GHz band for more.

² Comments of the Broadband Access Coalition, GN Docket 18-122 (filed October 29, 2018) ("BAC Comments") at 3.

Specifically, the C-Band Alliance explains that “any legitimate requirement for more spectrum for P2MP networks can be met using bands that are either currently available or are being considered for such operations.”³

GeoLinks strongly disagrees that fixed wireless providers have enough spectrum already. As explained above, currently fixed wireless providers primarily have access to only unlicensed spectrum. In situations where only unlicensed spectrum is available, most connections are limited to point-to-point (“P2P”) connections over short distances to avoid interference with other users. While fixed wireless providers have had success with these P2P connections, considering them “good enough” fails to account for all of the benefits that the technology *could* provide. First, even with extensive engineering and coordination, there is no guarantee that interference won’t occur at some point over unlicensed spectrum bands. This is especially true in densely populated, urban areas where there are numerous users in the unlicensed band. This interference can make it difficult and costly to engineer a dedicated link to a customer to ensure enterprise-grade broadband service – a service that a fixed wireless provider must offer to be competitive in urban markets. Second, P2P connections require expensive transmission equipment for each link (vs. one for multiple links). These costs can make it difficult for fixed wireless providers to competitively price broadband services, especially in residential markets where P2P equipment may be cost prohibitive for residential subscribers.

GeoLinks has advocated for the benefits of P2MP services in numerous filings before the Commission. This technology creates opportunities to connect multiple users in a more cost-effective manner (even if miles apart), making it ideal for serving multiple customers in one area at a lower cost. Despite the benefits of this technology, however, current spectrum policies hinder fixed wireless providers’ ability to take advantage of it. For example, P2MP connections are more susceptible to congestion and interference caused from extensive use of the unlicensed bands, especially in urban, highly-populated areas. This makes high-quality P2MP connections over unlicensed spectrum nearly impossible in some areas, clearly refuting the concept that fixed wireless providers have all the spectrum they need.

Moreover, while there are a number of active proceedings before the Commission that may provide fixed wireless providers the ability to access additional licensed, light-licensed, or shared spectrum resources, many of those proceedings are also considering whether specific

³ Comments of the C-Band Alliance, GN Docket 18-122 (filed October 29, 2018) at 45.

spectrum bands are better used for other uses (e.g. mobile wireless). In addition, the outcomes of those proceedings are still very much pending before the Commission and the Commission should not foreclose the option of fixed wireless use in the 3.7-4.2 GHz band just because spectrum might be available in another band at some point.

The BAC's suggested solution for the 3.7-4.2 GHz band addresses the current spectrum limitations experienced by fixed wireless providers by proposing practical options for P2MP use within the band that will not interfere with existing use by FSS Operators. The Commission should reject any arguments that fixed wireless providers have enough spectrum now (or will eventually) and therefore the Commission should not consider expanded use of the 3.7-4.2 GHz band. Instead, GeoLinks urges the Commission to look to implement the BAC's proposal and adopt spectrum policy that promotes innovation and competition.

C. The Commission Should Adopt Robust Build-Out Requirements for the Band

As GeoLinks has advocated before, the Company believes that spectrum rights should be subject to robust build-out and "use it or lose it" requirements. In its opening comments, the BAC supports the NPRM's 12-month build-out period and proposes other build out requirements including limitations on channel reservation periods, minimum build-out standards for P2MP licensees, and limitations on P2MP spectrum use until build out is complete.⁴ GeoLinks supports these suggested build-out requirements and urges the Commission to adopt them.

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⁴ See BAC Comments at 25.

III. CONCLUSION

GeoLinks supports the BAC's opening comments submitted on the NPRM and urges the Commission to adopt its win-win-win proposal for the 3.7-4.2 GHz band.

Respectfully submitted,

GEOLINKS, LLC

/s/ Skyler Ditchfield, Chief Executive Officer

/s/ Melissa Slawson, General Counsel/ V.P of Government
Affairs and Education

November 27, 2018