

Before the
Federal Communications Commission
Washington DC 20554

In the Matter of)	
)	GN Docket No. 18-122
Expanding Flexible Use of the 3.7 GHz)	RM-11791
to 4.2 GHz Band)	RM-11778

**REPLY COMMENTS OF THE
FIXED WIRELESS COMMUNICATIONS COALITION**

The Fixed Wireless Communications Coalition, Inc. (“FWCC”)¹ files these reply comments pursuant to the Order and Notice of Proposed Rulemaking in the above-captioned proceeding.²

Our first-round comments noted the 3.7-4.2 GHz band has 914 fixed service (FS) links (discrete transmit frequencies) under 61 call signs.³ The Notice proposes to “sunset” these.⁴ We asked the Commission to compensate displaced FS operators, much as it proposes to do for the co-equal Fixed Satellite Service (“FSS”), or else have incoming users reimburse the operators for the costs of relocation, as it did when reallocating the 2 GHz band. At the very least, we asked the Commission to extend the same grandfathering to FS links as it did to displaced 3650-3700

¹ The FWCC is a coalition of companies, associations, and individuals actively involved in the fixed services—*i.e.*, terrestrial fixed microwave communications. Our membership includes manufacturers of microwave equipment, fixed microwave engineering firms, licensees of terrestrial fixed microwave systems and their associations, and communications service providers and their associations. The membership also includes railroads, public utilities, petroleum and pipeline entities, public safety agencies, cable TV providers, backhaul providers, and/or their respective associations, communications carriers, and telecommunications attorneys and engineers. Our members build, install, and use both licensed and unlicensed point-to-point, point-to-multipoint, and other fixed wireless systems, in frequency bands from 900 MHz to 95 GHz. For more information, see www.fwcc.us.

² *Expanding Flexible Use of the 3.7 GHz to 4.2 GHz Band*, Order and Notice of Proposed Rulemaking, 33 FCC Rcd 6915 (2018) (“Notice”).

³ Data as of October 18, 2018, courtesy of Comsearch.

⁴ Notice at ¶ 48.

MHz licensees: five years or the balance of the license term, whichever is longer. (A pending waiver request would extend the grandfathered status through January 8, 2023.⁵) We noted further that FS links remaining in the band will need interference protection commensurate with their extremely high reliability: 99.999% or 99.9999%.

We respond here to the comments of Google LLC, The Broadband Access Coalition, and Microsoft Corporation, all filed on October 29, 2018.

Google LLC and The Broadband Access Coalition are among the parties that favor allowing point-to-multipoint operations in the band. Both propose specific changes to the Part 101 rules to facilitate point-to-multipoint use. The changes would address such matters as frequency coordination procedures, location accuracy, power limits, and various technical standards.⁶ All of these are factors in maintaining interference protection for existing FS links..

The FWCC requests in the strongest terms that (1) any such Part 101 rule changes be limited to the 3.7-4.2 GHz band; (2) the changes not be made applicable to existing point-to-point links, and (3) existing point-to-point links be fully protected from interference, per the existing standards, from systems operating under the new rules. Subject to these constraints, the FWCC does not oppose the Google and Broadband Access Coalition proposals for point-to-multipoint operation. Also subject to these constraints, the FWCC takes no position on proposed mobile use of the band.

⁵ *Wireless Telecommunications Bureau Seeks Comment on Wireless Council Request for Waiver of Citizens Broadband Radio Service Transition Deadline*, WT Docket 18-353. Public Notice, DA 18-1206 (released Nov. 27, 2018).

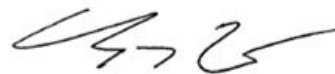
⁶ *See generally* Google LLC at 3-7; The Broadband Access Coalition at 22-32.

Microsoft likewise supports point-to-multipoint. It proposes that common carrier fixed link licenses be allowed to expire, while private (non-common-carrier) links be moved to the upper part of the band and be required to use TDD.⁷

Both suggestions relating to private links are unrealistic. As we noted in our first-round comments, many of the 4 GHz fixed systems are old enough that components needed to move them to new frequencies are no longer available. Furthermore, requiring TDD for point-to-point links would upend decades of careful frequency coordination by creating “bucking” situations at virtually every tower, with no concomitant advantage.⁸

We acknowledge that point-to-point operators will eventually depart the band, and seek to maintain high-reliability, uninterrupted service until then.

Respectfully submitted,



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⁷ Microsoft Corporation at 11-12.

⁸ Bucking occurs when an operator transmits in a part of the band that others on the same or a nearby tower use for receiving. TDD makes bucking inevitable. Interference results when the signal from the bucking transmitter reflects from a nearby building or signboard into an adjacent-channel receiver on the same tower or one nearby. Because a bucking transmitter threatens other licensees’ use of their own channels, frequency coordinators approve them only as a last resort, and usually require live testing.