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

In the Matter of	)	
	)	
Expanding Flexible Use of the 12.2-12.7 GHz	)	WT Docket No. 20-443
Band	)	
	)	
Expanding Flexible Use of the 12.7-13.25 GHz	)	GN Docket No. 22-352
Band for Mobile Broadband or Other Expended	)	
Use	)	

# **REPLY COMMENTS OF THE 5G FOR 12 GHz COALITION**

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## **REPLY COMMENTS OF 5G FOR 12 GHZ COALITION**

The 5G for 12 GHz Coalition ("Coalition") submits these reply comments in response to the Federal Communications Commission's ("Commission") *Report and Order and Further Notice of Proposed Rulemaking and Notice of Proposed Rulemaking and Order* ("*Further Notice*" or "*Notice*") seeking information on whether the 12.2-12.7 GHz ("12.2 GHz") and 12.7-13.25 GHz ("12.7 GHz") bands are suitable for expanded licensed and unlicensed use and how the Commission can make more efficient use of the bands.<sup>1</sup>

#### I. INTRODUCTION & SUMMARY

An internet connection is critical in the modern world, enabling remote work,

communication with family and access to education, online shopping, telehealth,

government services and more. Unfortunately, millions of Americans are currently on the

wrong side of the digital divide and the Pew Research Center has identified disparate

<sup>&</sup>lt;sup>1</sup> Expanding Flexible Use of the 12.2-12.7 GHz Band, Expanding Use of the 12.7-13.25 GHz Band for Mobile Broadband or Other Expanded Use, WT Docket No. 20-443, GN Docket No. 22-352, Report and Order and Further Notice of Proposed Rulemaking and Notice of Proposed Rulemaking and Order, FCC 23-36 (rel. May 19, 2023) ("Further Notice" or "Notice").

Internet access as a driver of inequality.<sup>2</sup> This inequality is likely to persist and grow unless the Commission takes immediate steps to identify and maximize more spectrum in order to supercharge American networks, making them faster and more efficient to deploy.

The need for additional spectrum for the delivery of broadband has underscored the importance of increasing the efficiency of previously allocated spectrum wherever possible. In this proceeding, the record clearly indicates that the Commission can take immediate action to reach Americans on the wrong side of the digital divide by earmarking 12.2 GHz spectrum for optimization.<sup>3</sup> One of the current Multichannel Video Distribution and Data Service ("MVDDS") incumbents in the band, RS Access, has highlighted the unique properties and advantages of the centimeter wave spectrum at 12.2 GHz and how it can support increased terrestrial broadband deployments. According to RS Access, the band is "ideal for deployments in a wide range of services, including high-powered fixed . . . applications."<sup>4</sup> However, the 12.2 GHz band's greatest advantage is that it is available for

<sup>2</sup> See Emily A. Vogels, *Digital divide persists even as Americans with lower incomes make gains in tech adoption*, PEW RESEARCH CENTER (June 22, 2021), *available at* https://www.pewresearch.org/short-reads/2021/06/22/digital-divide-persists-even-as-americans-with-lower-incomes-make-gains-in-tech-adoption/.

<sup>3</sup> See, e.g., Comments of the Public Interest Organizations, WT Docket No. 20-443, GN Docket No. 22-352, 2 (filed Aug. 9, 2023) ("PIOs Comments") (finding that "the public interest is best served by a new framework for fixed wireless access in 12 GHz that protects the operations of all band incumbents . . . but that greatly expands both the utility and usage of the band for terrestrial broadband"); Comments of DISH Network Corporation, WT Docket No. 20-443, GN Docket No. 22-352, 5 (filed Aug. 9, 2023) ("DISH Comments") (contending that a fixed point-to-multipoint service can share spectrum in the 12.2 GHz band with satellite services in the same geographic region); Comments of the Competitive Carriers Association, WT Docket No. 20-443, GN Docket No. 22-352, 2 (filed Aug. 9, 2023) ("CCA Comments") (finding that spectrum in the 12.2 GHz and 12.7 GHz bands "would complement existing next generation services and help unlock the potential that technological evolution and 6G offers").

<sup>4</sup> See Initial Comments of RS Access, LLC, WT Docket No. 20-443, GN Docket No. 22-352, 5 (filed Aug. 9, 2023) ("RS Access Comments"). In its 2021 comments in this proceeding, RS

immediate deployment, enabling quicker and easier network rollouts, wasting no time connecting the millions of Americans without access to high-speed broadband services.

In the absence of spectrum auction authority, reallocating the 12.2 GHz band for highpowered, two-way fixed wireless services would represent a significant step with regards to developing a pipeline of mid-band spectrum for expanded uses. According to RS Access, "[t]his proceeding is . . . an exceedingly rare chance to add massive amounts of mid-band spectrum to the nation's pipeline while also paving the way for new, American-controlled technology as 5G and 6G services become globally standardized."<sup>5</sup> Adding competition in the broadband market through the mid-band spectrum in the 12.2 GHz band "will also encourage more innovation, more choices, and greater opportunities for customers, particularly those that stand to benefit in unserved and underserved communities."<sup>6</sup> As such, the Coalition recommends that the Commission issue an *Order* that includes the technical and operational parameters for highpowered point-to-point and point-to-multipoint fixed wireless service by December 31, 2023. The Commission can then consider the more complex issues associated with unlicensed uses in the lower portion of the band as well as whether to open the 12.7 GHz band for mobile wireless and other expanded uses.

Access submitted a study conducted by Roberson & Associates that found that the band "combines the propagation characteristics and coverage advantages of lower mid-band spectrum with the high capacity and throughput of the millimeter-wave ("mmW") bands." *See* Roberson and Associates, LLC, The 12 GHz Band: Analysis of Physical Characteristics and Applicable Technologies (July 7, 2021) ("Roberson Report"), appended to Reply Comments of RS Access, LLC, WT Docket No. 20-443, GN Docket No. 17-183 (filed July 7, 2021).

<sup>&</sup>lt;sup>5</sup> RS Access Comments at 2.

<sup>&</sup>lt;sup>6</sup> Comments of INCOMPAS, WT Docket No. 20-443, GN Docket No. 22-352, 2 (filed Aug. 9, 2023) ("INCOMPAS Comments").

In this reply comment, the 5G for 12 GHz Coalition discusses how the comments and technical analysis submitted in this proceeding clearly demonstrates that:

- Permitting MVDDS licensees to use the 12.2 GHz band for high-powered, two-way fixed broadband is achievable and can be accomplished in a manner that protects satellite incumbents in the band from harmful interference;
- Making use of the band for fixed broadband is in the public interest and would represent "another innovative leap forward in spectrum management policy;"<sup>7</sup>
- Current licensees and equipment manufacturers are prepared to quickly bring service to the market should the Commission modify the band for more expanded use; and
- Creating priority access for Tribal entities in the 12.2 GHz band would provide these unserved and underserved communities with much-needed spectrum resources.

Based on the record showing that co-existence between MVDDS and satellite providers is feasible, the Coalition implores the Commission to act now to unlock the 500 megahertz of existing terrestrial licenses in the 12.2 GHz band to successfully ensure Americans have access to next generation broadband services. Adopting rules changes to the band by the end of the year will supercharge broadband deployment, give MVDDS providers the opportunity to compete for Broadband Equity Access and Deployment funding, and help the Commission meet its goal of permanently bridging the digital divide in unserved and underserved communities.

# II. ANALYSIS SUBMITTED INTO THE RECORD DEMONSTRATES IT IS FEASIBLE TO BRING HIGH-POWERED, TWO-WAY FIXED BROADBAND TO MARKET WITHOUT DISRUPTING SATELLITE INCUMBENTS

As the record reflects, the Commission's proceeding on expanding flexible use in the 12.2-12.7 GHz band ("12.2 GHz band") has the potential to promote broadband market competition and to increase the availability of fixed broadband services through licensed uses.

<sup>&</sup>lt;sup>7</sup> PIOs Comments at 2.

The Commission has long valued the role that mid-band spectrum can play in promoting adoption of next generation services. In the C Band proceeding, the Commission noted that "mid-band spectrum offers more favorable propagation characteristics relative to higher bands for fixed wireless broadband services in less densely populated areas. Given these characteristics, we expect mid-band spectrum to play a prime role in next-generation wireless services."<sup>8</sup>

Promoting broadband competition by increasing the intensity of use of mid-band spectrum, like the 12.2 GHz band, through sharing will deliver more choices and lower costs for consumers in every corner of the nation. As noted throughout this proceeding, present-day systems can enable spectrum sharing by identifying other spectrum users' actual usage across multiple dimensions, including time, frequency, power, and other measures, and exploit idle frequency assignments in the same spectrum. To this end, several stakeholders, including the primary Direct Broadcast Satellite ("DBS") provider in the band and current MVDDS incumbents in the band, have offered specific proposals in accordance with the *Further Notice*, that the Coalition believes should form the basis for technical and operational rules that will allow the Commission to make more efficient use of the spectrum in these bands.

DISH, the primary user of the band, conducted a technical analysis by prominent spectrum engineering firm, RKF Engineering, to determine whether it was possible for a fixed wireless service provider to avoid the potential for interference to NGSO satellite terminal receivers ("RKF Study"). Overwhelmingly, RKF found that co-existence in the band between

<sup>&</sup>lt;sup>8</sup> *Expanding Flexible Use of the 3.7 to 4.2 GHz Band*, GN Docket No. 18-122, Report and Order and Order of Proposed Modification, FCC 20-22 (rel. Mar. 3, 2020), *available at* https://docs.fcc.gov/public/attachments/FCC-20-22A1.pdf.

NGSO FSS and high-powered, two-way fixed wireless service is achievable. To reach this conclusion, RKF studied three regions of the country—(1) Augusta, Maine; (2) Portland, Oregon; and (3) Tampa, Florida—to determine whether it was possible to deploy high-powered, two-way fixed wireless service while protecting incumbents from harmful interference. The study, which assessed a fixed 5G base station build-out in the 12.2.-12.7 GHz band subject to an EIRP limit of 70 dBm/100 MHz/sector employing Adaptive Antenna System ("AAS") technology to avoid the potential for interference to NGSO FSS terminal receivers in the band, indicated that "co-existence of fixed 5G base stations with NGSOs is feasible."<sup>9</sup> Furthermore, the RKF Study finds that an EIRP limit is acceptable, and that "the limit does not need to vary between urban and rural environments; rather, it should vary based on the use of a beamforming antenna and the existence or absence of NGSO and DBS dishes within 50 km of the fixed base station at the time of deployment."<sup>10</sup> Based on the analysis, DISH suggests that "the clear conclusion of the study is that, no matter the actual locations at the time of deployment, it is almost certain that the positioning algorithm will devise a zero-interference solution."<sup>11</sup>

However, in order to ensure that NGSO FSS terminals do not experience harmful interference, DISH makes clear that the Commission should prohibit fixed wireless deployments where interference cannot be avoided. To optimize use of the band and prevent interference, DISH proposes a coordination process that could be accomplished through a neutral third-party database in which all DBS terminals, NGSO terminals, fixed point-to-point stations, fixed point-

<sup>11</sup> *Id*. at 19.

<sup>&</sup>lt;sup>9</sup> See Ted Kaplan, RKF Engineering, *Fixed Two-Way 5G Interference-Free Build-Out in the 12.2-12.7 GHz Band*, 36 (Aug. 9, 2023), appended to Comments of DISH, WT Docket No. 20-443, GN Docket No. 22-352 (filed Aug. 9, 2023) ("RKF Study").

<sup>&</sup>lt;sup>10</sup> See DISH Comments at 15.

to-multipoint hub stations and fixed point-to-multipoint user stations must be registered in order to receive protection.<sup>12</sup> If incumbents update the database with regularity, this "first-in-time, first-in-right" process should eliminate confusion and ensure greater coordination between users of the band. Furthermore, the DISH proposal would make an appropriate stand-in for the coordination system being requested by public interest advocates in this proceeding.<sup>13</sup>

In the alternative, RS Access proposes power limits on two-way services within the band of 65 dBm per 100 MHz per sector, utilizing a cellular Radio Access Network ("RAN") architecture that reflects the current authorization. Further, RS Access suggests that any restrictions on mobility in the band should be at the Customer Premise Equipment ("CPE") side.<sup>14</sup> RS Access suggests that these reforms would be sufficient to enable a robust fixed wireless service in 12.2-12.7 GHz.

These proposals stand in contrast to blanket disapprovals of co-existence in the 12.2 GHz band from NGSO FSS and DBS providers.<sup>15</sup> Many of these companies, like DirecTV, offer limited service in the band, unlike DISH which is the primary user of the band and is seeking expansion. The Coalition urges the Commission not to prevent 500 megahertz of valuable mid-

<sup>&</sup>lt;sup>12</sup> See id. at Exhibit 3.

<sup>&</sup>lt;sup>13</sup> See PIOs Comments at 11. The public interest advocates in this proceeding include Public Knowledge, New America's Open Technology Institute, Benton Institute for Broadband and Society, Center for Rural Strategies, Next Century Cities, Access Humboldt, and X-Lab.

<sup>&</sup>lt;sup>14</sup> See RS Access Comments at 7.

<sup>&</sup>lt;sup>15</sup> *See* Comments of OneWeb, GN Docket No. 22-352, WT Docket No. 20-443, 4 (filed Aug. 9, 2023); Further Comments of DirecTV, LLC, WT Docket No. 20-443, 9 (filed Aug. 9, 2023) (claiming that anything in excess of an EIRP limit of 50 dBW for fixed operations in the 12 GHz band would be jeopardize coordination or coexistence).

band spectrum from being brought to the fixed wireless market in order to maintain DirecTV's limited service offerings in the band

As the Coalition argued in its comments—numerous examples of spectrum sharing between fixed wireless and satellite service exist, and technology has developed in a way that make many of the hard limits set on Multichannel Video Distribution and Data Service ("MVDDS") providers unnecessary.<sup>16</sup> These bands have been jointly allocated to satellite and terrestrial service in an attempt to make more intensive and efficient use of its spectrum resources. Given the needs for spectrum, the Commission should not hesitate to consider DISH's proposals in order to wring additional efficiency out of the band.

# III. REALLOCATING THE BAND FOR FIXED WIRELESS IS IN THE PUBLIC INTEREST

Opening the 12.2 GHz band for fixed wireless broadband is not only technically feasible, but it is also in the public interest. Modifying the band will promote competition, bridge the nation's digital divide, and advance issues of digital equity. As the Public Interest Organizations ("PIOs") participating in this proceeding explain, "expanding access to spectrum for terrestrial broadband use in the currently underutilized 1,050 megahertz between 12.2-13.25 GHz can facilitate the deployment of 5G services, promote competition, enhance the benefits of next generation Wi-Fi, spur innovation, and help to address the digital divide in underserved communities."<sup>17</sup> Go Long Wireless, a MVDDS licensee, contends that this proceeding

<sup>&</sup>lt;sup>16</sup> See Comments of the 5G for 12 GHz Coalition, WT Docket No. 20-443, GN Docket No. 22-352, 7-8 (filed Aug. 9, 2023) ("Coalition Comments") (highlighting examples of spectrum sharing, including the C-band (3.7-4.2 GHz), the upper 6 GHz band (6.7-7.075 GHz), the extended Ku-band (10.7-11.7 GHz), the 12 GHz band itself, the CARS band (12.7-13.25 GHz), portions of the Ka-band (19.3-19.7 GHz, 27.5-28.35 GHz, 29.1.-29.25 GHz), and the 40 GHz band (46.9-47 GHz, 47.2-48.2 GHz).

<sup>&</sup>lt;sup>17</sup> PIOs Comments at 32.

represents "a critical step toward enhancing fixed wireless usage within the 12.2 GHz band with bi-directional capabilities and minimal interference."<sup>18</sup> DISH points out that increased deployment of fixed service in the 12.2 GHz band will increase access to the Internet as "[r]obust fixed service in the 12.2 GHz band could be an important component of the NTIA's [BEAD] program."<sup>19</sup> And according to RS Access, "[t]his proceeding is . . . an exceedingly rare chance to add massive amounts of mid-band spectrum to the nation's pipeline while also paving the way for new, American-controlled technology as 5G and 6G services become globally standardized."<sup>20</sup>

*Increased Competition:* Greater competition in the wireless market, and specifically through the 12.2 GHz band, is important for consumers for a variety of reasons, and the record reflects why updating the technical and operational rules for this spectrum is critical for competition. Allowing MVDDS providers to offer fixed wireless will increase broadband competition and as a result give consumers more internet access options. Fixed broadband can serve as an alternative, lower-cost option for consumers. As INCOMPAS explains, when there are multiple providers of advanced broadband services, including fixed wireless services, consumers benefit through the lower prices, faster service, and greater innovation that competitive providers bring to a market.<sup>21</sup> As the Computer & Communications Industry

<sup>&</sup>lt;sup>18</sup> Comments of Go Long Wireless, LLC, WT Docket No. 20-443, GN Docket No. 22-352, 2 (filed Aug. 9, 2023) ("Go Long Wireless Comments").

<sup>&</sup>lt;sup>19</sup> DISH Comments at 20.

<sup>&</sup>lt;sup>20</sup> RS Access Comments at 2.

<sup>&</sup>lt;sup>21</sup> INCOMPAS Comments at 5-7 (urging the Commission to expand terrestrial fixed use in the 12.2 GHz band to spur competition in a concentrated fixed BIAS marketplace).

Association similarly illustrate, this proceeding presents the Commission with the opportunity to "invite new entry and new innovation, creating an even more competitive wireless market and an even more vibrant economy."<sup>22</sup>

Others in the record have echoed the importance of the 12.2 GHz band for increased

## competition:

- According to DISH, it and "other providers could bring much needed competition to the rural households that today only have one alternative, and could provide an option for the households that currently lack any alternative, by deploying high-speed fixed wireless service using the 12.2 GHz band."<sup>23</sup>
- WISPA—Broadband Without Boundaries suggests that the shared spectrum framework it proposes in the 12.2 GHz and 12.7 GHz bands "will advance access to affordable and competitive broadband services in served areas, connect more Americans to broadband in underserved and unserved areas, and enhance and expand services in more urban and dense areas, as well as make necessary spectrum resources available to support increasingly essential applications and services such as telemedicine, precision agriculture, remote education, and the internet of things."<sup>24</sup>
- According to the Competitive Carriers Association, "Fixed Wireless Access ("FWA") and 5G are currently in high demand and key to competition and global technological leadership, and 6G on the horizon is a strategic evolution of technology that requires significant advance preparation."<sup>25</sup>
- Finally, RS Access urges the Commission to make the 12.2-12.7 GHz spectrum "available for Fixed Wireless Access ("FWA")" as it "would increase competition for broadband services, jumpstart the upper mid-band ecosystem and dramatically enhance the utility of the adjacent 12.7-13.25 GHz band."<sup>26</sup>

<sup>23</sup> DISH Comments at 24.

<sup>24</sup> Comments of WISPA—Broadband Without Boundaries, WT Docket No. 20-443, GN Docket No. 22-352, 4 (filed Aug. 9, 2023) ("WISPA Comments").

<sup>25</sup> CCA Comments at 2.

<sup>26</sup> RS Access Comments at 2.

<sup>&</sup>lt;sup>22</sup> Comments of the Computer and Communications Industry Association, WT Docket No. 20-443, GN Docket No. 22-352, 1 (filed Aug. 9, 2023).

*Bridging the Digital Divide:* The record in this proceeding also shows why updating the Commission's rules will help close the digital divide. As explained by the PIOs, opening access to unused capacity in the 12.2 GHz band "will substantially improve broadband access and capacity in rural, Tribal, and other hard-to-serve areas," and "provide rural ISPs and other entities with the spectrum-for-infrastructure they need to expand broadband services and help to bridge the digital divide."<sup>27</sup> INCOMPAS argues that increasing the number of providers offering fixed wireless service via the 12.2 GHz band will ensure that "consumers across the country and on the wrong side of the digital divide gain increased access to next-generation broadband service."<sup>28</sup> Finally, DISH explains that fixed wireless networks can help close the digital divide given their "inherent advantages in serving sparsely populated areas relative to other broadband technologies, including NGSO constellations. These advantages include lower deployment costs, the ability to leverage existing infrastructure, flexible capacity and growth, and fast deployment."<sup>29</sup>

*Digital Equity:* Current MVDDS licensees can advance digital equity by offering a highpowered fixed service that reaches low-income consumers. According to DISH, "[f]ixed wireless service can reach households without needing to build physical cable or fiber to remote areas"—a traditional barrier to reaching unserved and underserved communities.<sup>30</sup> Fixed

<sup>&</sup>lt;sup>27</sup> Comments of New America's Open Technology Institute, Public Knowledge, *et al.*, WT Docket No. 20-443, GN Docket No. 17-183 (filed May 7, 2021) at 12, 27.

<sup>&</sup>lt;sup>28</sup> INCOMPAS Comments at 7-8.

<sup>&</sup>lt;sup>29</sup> DISH Comments at 16 (explaining the substantial public benefits of potential fixed wireless deployments).

<sup>&</sup>lt;sup>30</sup> *Id.* at 22-23.

wireless promises to be the fastest and most cost-effective way for providers to meet the needs of unserved customers and can speed broadband adoption and empower consumers. Furthermore, as discussed below in Section V, current MVDDS licensees have an opportunity to make significant electromagnetic spectrum resources available to Tribal entities that want to deliver next generation services on Tribal lands.

### IV. FIXED BROADBAND CAN BE BROUGHT TO MARKET QUICKLY FOLLOWING COMMISSION ACTION

With the Commission's spectrum auction authority lapsing earlier this year, the agency must examine how to maximize its spectrum resources for advanced services like high-powered, two-way point-to-point and point-to-multipoint fixed wireless services. RS Access rightfully asserts that "the [fixed wireless] market is expanding and desperately needs high-capacity spectrum"<sup>31</sup> and, as a result, immediate action is needed to ensure that this emerging market does not run into capacity constraints.

At the same time, industry must be prepared to follow the Commission's lead and quickly bring these important services to market when the agency acts to expand certain bands for more flexible use. In this proceeding, the Commission has received assurances that, were it to act by the end of the year to permit the use of the 12.2 GHz band for fixed wireless use, providers and equipment manufacturers are prepared to bring both the necessary equipment and products to market to enable a robust fixed wireless service. Incumbent licensees like DISH, Go Long Wireless, and RS Access have indicated that they intend to bring fixed wireless service to market in short order following any Commission decision to expand the band for more flexible uses.

<sup>&</sup>lt;sup>31</sup> RS Access Comments at 3.

For example, Go Long Wireless contends that it is "poised to provide a viable equipment platform that will conform and perform within any new rules adopted by the Commission as well as deploy such equipment for commercial use by [Internet Service Providers]" and indicates that it is "well-positioned" to work with its partners "to assist in deploying both point-to-point (backhaul) and point-to-multipoint fixed wireless service."<sup>32</sup> Similarly, RS Access claims that its proposed modifications to the technical and operational rules "would allow rapid integration into existing RAN architecture, as well as within a chipset ecosystem that will likely encompass the entirety of the 12.2-13.25 GHz band. This would also facilitate a more robust service more rapidly, supporting consumers and competition in the marketplace."<sup>33</sup> DISH argues that the "12.2 GHz band presents an opportunity to put spectrum to use for the benefit of consumers *today*" and notes that incumbent MVDDS providers can deploy "quickly" in the band due to the groundwork laid by licensees and vendors for the deployment of 12.2 GHz spectrum for terrestrial 5G.<sup>34</sup>

At the same time, equipment manufacturers have submitted for the record that they are, in most cases, capable of releasing products that comply with new Commission rules immediately or no later than 2025. The Cambridge Broadband Network Group, a supplier of point-to-multipoint fixed wireless technologies, has existing and developmental products "which are well suited to operating within the MVDDS bands in a high-power, two-way terrestrial fixed wireless

<sup>&</sup>lt;sup>32</sup> Go Long Wireless Comments at 3.

<sup>&</sup>lt;sup>33</sup> RS Access Comments at 7.

<sup>&</sup>lt;sup>34</sup> DISH Comments at 24-25.

configuration."<sup>35</sup> In short, the Commission should expect MVDDS incumbents and their vendors to act quickly to bring fixed broadband to their customers.

One aspect driving MVDDS providers to bring fixed wireless service in the 12.2 GHz band to market quickly is the desire to take advantage of upcoming funding opportunities presented by the National Telecommunications and Information Administration's ("NTIA") Broadband Equity Access and Deployment ("BEAD") Program.<sup>36</sup> The BEAD Program offers a once-in-a-generation investment of \$42.5 billion to deploy broadband infrastructure to unserved and underserved areas in the nation. Tax dollars must be spent only on networks built to last, and those networks that can support the jobs and bandwidth of the future. As such, the Coalition believes such investment should be made in robust, reliable and scalable networks including high-speed fixed wireless that can offer greater connectivity today and higher speeds in the future. Such an approach will best meet consumer, business, community anchor institutions, and government agency needs over time—without the government having to invest additional funds in the future in broadband network capacity.

Finally, bringing fixed wireless broadband quickly to market will require the Commission to forgo an auction and instead grant new authority to existing MVDDS providers that previously acquired licenses in the band through auction. Because any second auction would require either an overlay to respect the rights of MVDDS incumbents or modification of the MVDDS licenses, the Coalition posits that planning an additional auction would be a long and

<sup>&</sup>lt;sup>35</sup> Letter of Paul Wright, VP Sales and Customer Operations, Cambridge Broadband Networks Group Limited, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 20-443, GN Docket No. 22-352, 1 (Aug. 9, 2023).

<sup>&</sup>lt;sup>36</sup> See generally Broadband Equity Access and Deployment Program, NAT'L TELECOMM. & INFO. ADMIN., https://broadbandusa.ntia.doc.gov/funding-programs/broadband-equity-access-and-deployment-bead-program (last visited Sep. 8, 2023).

cumbersome process. Expanding the existing license rights of the MVDDS licensees will allow for quicker deployment, and permit the MVDDS licensees to participate in the BEAD program.

### V. THE RECORD SUPPORTS PROVIDING TRIBAL ENTITIES WITH PRIORITY ACCESS TO 12.2 GHz SPECTRUM OVER TRIBAL LANDS

In our initial comments, the Coalition urged the Commission to follow the lead of stakeholders like Tribal Ready and the PIOs calling on the agency to include a rural Tribal window in its rules that would to allow Tribal entities to avail themselves of the opportunity to use the 12.2 GHz band to deliver critical fixed wireless service to consumers on Tribal lands.<sup>37</sup> Because it can offer last-mile connectivity to unserved and underserved homes and businesses, fixed wireless services will be an integral part of the Commission's efforts to extend the reach of broadband into areas where providers may struggle to develop a sustainable business model for fiber or coaxial technologies. As the Administration attempts to close the digital divide through efforts like the BEAD Program, the Commission must enable new opportunities for providers to deliver this viable alternative service. Given how critical fixed wireless will be to the nation's broadband future, the Coalition is encouraged to see considerable support for the idea of a tribal set-aside included in the record and continues to recommend that the Commission include priority access for Tribal entities in its final rules in this proceeding.

In response to the Commission's inquiries into how to actualize priority access for Tribal entities, DISH suggests making 100 megahertz of spectrum in the 12.2 GHz band "available to

<sup>&</sup>lt;sup>37</sup> See Coalition Comments at 9-11 (citing Letter from Joe Valandra, President & CEO, Tribal Ready, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 22-352 et al. (filed May 10, 2023) (requesting that the Commission provide for a set aside for Tribal entities to accelerate [fixed wireless broadband] on Tribal lands); Letter from Michael Calabrese, Director, Wireless Future Program, New America's Open Technology Institute, and Harold Feld, Senior Vice President, Public Knowledge, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 22- 352 et al. at 3 (filed May 10, 2023) ("Open Technology Institute and Public Knowledge Ex Parte").

requesting Tribal entities at no charge under an agreement" that would give these entities the ability to use as much of the spectrum as necessary to deliver fixed wireless services.<sup>38</sup> DISH, the primary user of the band, proposes to establish private agreements that would permit Tribal entities to utilize these specific portions of the band with the intention of addressing the shortfall of spectrum resources available to Tribal entities and giving them a chance to bring new broadband services to their residents. Specifically, DISH notes that the 100 megahertz proposal will attempt to remedy the digital inequity that has resulted from Tribal lands historical lack of "meaningful access to wired and wireless communications services."<sup>39</sup> DISH's proposal to make one-fifth of the spectrum available to Tribal entities also meets a request made by public interest advocates in this proceeding that any expansion of the rights of incumbent MVDDS licensees to deliver fixed wireless service include a license modification with a condition "that all or at least a substantial portion of the channels on Tribal lands will be made freely available for broadband deployment at the request of Tribal authorities."<sup>40</sup>

In fact, permitting Tribal entities to deliver fixed wireless through the 12.2 GHz band has the potential to bring new broadband services to communities that have traditionally lacked adequate broadband options.<sup>41</sup> Offering 100 megahertz channels for fixed wireless broadband will ensure that consumers have access to high-speed, low latency service at affordable prices.<sup>42</sup>

<sup>&</sup>lt;sup>38</sup> See DISH Comments at 16-17.

<sup>&</sup>lt;sup>39</sup> *Id.* at 16-17.

<sup>&</sup>lt;sup>40</sup> PIOs Comments at 3-4.

<sup>&</sup>lt;sup>41</sup> *See id.* at 24.

<sup>&</sup>lt;sup>42</sup> See WISPA Comments at 1 (contending that wireless Internet service providers ("WISPs") "bring critical internet access to millions of Americans in . . . Tribal areas of the country,

Fixed wireless is a viable and more affordable alternative to the services available to residents of Tribal lands. While the Coalition recognizes the important role that satellite service has had in making advanced services available, the Coalition urges the Commission to take an all-of-theabove approach in order to level the playing field for Tribal residents. The Coalition believes that offering the combination of fixed, fixed wireless, and satellite service is the only way to ensure that these customers receive the access they need and options they want. As the PIOs indicate in their comments "there are no licenses conveying bidirectional and higher-power rights for fixed wireless service" in the band and making 100 megahertz of spectrum "will encourage Tribes and commercial [fixed wireless] licensee[s] to enter into partnership agreements that hasten the deployment of networks in Tribal areas and benefit Tribal communities."<sup>44</sup> can assist the Commission's efforts to bridge the digital divide in these unserved communities and ensure that consumers on Tribal lands can take advantages of the civic and economic benefits that the Internet landscape has to offer.

Finally, creating a set-aside for Tribal entities would not only comport with the Commission's current efforts to bring next generation services to consumers on Tribal lands, it

offering reliable, cost-effective and innovative service options where they did not previously exist").

<sup>&</sup>lt;sup>43</sup> PIOs Comments at 26. *See also* Open Technology Institute and Public Knowledge Ex Parte at 3 ("The Commission should also move with haste to adopt these tribal provisions so that tribes can take advantage of the BEAD funding that could subsidize tribal deployment in the 12.2 and 12.7 GHz Bands.").

<sup>&</sup>lt;sup>44</sup> See Transforming the 2.5 GHz Band, WT Docket No. 18-120, Report and Order, FCC 19-62 (2019) (adopting a Tribal priority window for tribal entities to obtain EBS licenses on Tribal lands).

would also align with other federal agencies efforts to bring more spectrum resources to Tribes across the country. Last November, the U.S. Department of the Interior established a memorandum of understanding with the Commission and NTIA in which it pledged to increase coordination in order to expand access to electromagnetic spectrum resources available to Tribal lands and Hawaiian home lands.<sup>45</sup> The MOU's stated purpose of "work[ing] together to promote the deployment of broadband and other communications services on, and expand access to spectrum over, Tribal lands and Hawaiian home lands" could be accomplished by the Commission creating a priority access for Tribal entities in the 12.2 GHz spectrum. The Coalition urges the Commission not to miss this opportunity to align Commission efforts with those of the federal government in bringing new broadband resources to bear on Tribal lands.

<sup>&</sup>lt;sup>45</sup> See Memorandum of Understanding Among the U.S. Dep't of Interior, FCC, and the U.S. Dep't of Comm. Nat'l Telecom. & Info. Admin., (Nov. 23, 2022), *available at* https://www.bia.gov/sites/default/files/dup/inline-files/mou\_esb46-009818\_doi-fccntia\_electromagnetic\_spectrum\_on\_tribal\_lands\_2022-11-23\_final\_fcc\_ntia\_doi\_signed\_508.pdf.

# VI. CONCLUSION

For the reasons stated herein, the 5G for 12 GHz Coalition urges the Commission to

expand the 12.2 GHz band for high-powered, two-way terrestrial fixed use.

Respectfully submitted,

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