

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Inquiry Concerning the Deployment of)	GN Docket Nos. 09-47 and 09-137
Advanced Telecommunications Capability)	
to all Americans in a Reasonable and)	
Timely Fashion, and Possible Steps to)	
Accelerate Such Deployment Pursuant to)	
Section 706 of the Telecommunications Act)	
of 1996, as amended by the Broadband Data)	
Improvement Act)	
)	
A National Broadband Plan for Our Future)	GN Docket No. 09-51

To: The Commission

**REPLY COMMENTS – NBP Public Notice #6
THE WIRELESS INTERNET SERVICE PROVIDERS ASSOCIATION**

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Summary of Reply Comments – NBP Public Notice #6

The Wireless Internet Service Providers Association (“WISPA”) submits these Reply Comments to address aspects of certain Comments filed in response to NBP Public Notice #6. Throughout this proceeding, WISPA has emphasized the need for additional spectrum allocations for fixed wireless broadband use because often such spectrum represents the only means by which consumers in rural and unserved areas can receive broadband service. WISPA believes that 300 MHz of spectrum will be needed for fixed wireless broadband to alleviate increasingly noisy environments and to meet consumer demands for bandwidth-intensive applications. This spectrum should be made available on reasonable and affordable terms under a “licensed lite” regime that decreases burdensome barriers to entry for service providers.

While some interests in the mobile wireless industry seek upwards of 800 MHz of additional spectrum for broadband services, these parties emphasize their desire for allocations for *mobile* uses, leaving critical *fixed* wireless spectrum allocations as a near-afterthought. In fact, fixed wireless broadband faces challenges such as (a) unavailable or unaffordable “middle mile” or “second mile” facilities, (b) the expense of towers and rooftops that serves as a barrier to network deployment for wireless service providers, and (c) a lack of access to low-frequency, interference-free spectrum. The Commission cannot afford to allocate 800 MHz of additional mobile wireless spectrum without addressing the particular challenges of providing fixed wireless spectrum for these unserved and underserved areas; otherwise, many Americans will continue to find themselves relegated to dead zones without a meaningful broadband choice.

Certain spectrum bands, if appropriately licensed and allocated, offer near-term opportunities for enabling expanded fixed wireless broadband coverage to these unserved and underserved areas. In various proceedings, WISPA has proposed changes to the TV white space rules and the 3650 MHz Service also should be modified to make these more conducive for wide-scale WISP deployment. WISPA and others have urged the Commission to make spectrum available through non-exclusive “licensed lite” processes, especially for spectrum in rural, underserved and unserved markets. WISPA also urges the Commission to undertake an audit of its spectrum to identify “new” spectrum to allocate for fixed wireless broadband.

TV White Spaces. WISPA believes that while TV white space spectrum is ideal for deploying fixed broadband services, mandating the use of this spectrum for backhaul would undermine the delivery of fixed broadband deployments directly to end users in unserved and underserved areas. Backhaul allocations in the TV white spaces would require too much power and too much spectrum such that WISP point-to-multipoint distribution services would be unduly and irrevocably harmed, to the detriment of consumers. Also, WISPA does not support Flinn Broadcasting Corporation’s proposal for new services using low VHF Channels 2-6.

“Licensed Lite” Proposal. WISPA proposed expanded use of the “licensed lite” licensing mechanism to help counter the problems presented by use of unlicensed devices in the 900 MHz, 2.4 GHz and 5 GHz bands. Other commenters also addressed these concerns, similarly observing the presence of congestion that jeopardizes service. WISPA does not agree with AT&T and Verizon Wireless, who assert that there are sufficient allocations for unlicensed spectrum and no additional allocations are necessary. Their statements about the *quantity* of usable spectrum, especially to the extent they may be opining on spectrum for fixed wireless

broadband, cannot be given credibility. Moreover, they miss the larger marketplace realities experienced by WISPs and others that unlicensed spectrum for wide-area, fixed wireless systems lacks *quality* – the unlicensed spectrum the Commission has made available for fixed wireless is of decreasing utility to WISPs, the communities they serve and other areas that would benefit from fixed wireless broadband services.

Spectrum Audit. WISPA agrees with the large number of commenters that ask the Commission to conduct a spectrum audit to quickly identify and reallocate spectrum for broadband. If Congress does not direct the Commission and/or NTIA to audit spectrum, WISPA agrees that the agencies should undertake the inventory without legislative mandate.

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THE WIRELESS INTERNET SERVICE PROVIDERS ASSOCIATION**

The Wireless Internet Service Providers Association (“WISPA”) submits these Reply Comments to address aspects of certain Comments filed in response to NBP Public Notice #6.¹ WISPA emphasizes the need for the Commission to allocate additional spectrum for fixed wireless broadband because such spectrum often represents the only means by which consumers in rural and unserved areas can receive broadband service. WISPA also urges the Commission to ensure that fixed wireless spectrum is made available on reasonable and affordable terms under a “licensed lite” regime that decreases burdensome barriers to entry for service providers.

Discussion

The record is replete with cries from mobile wireless interests that a substantial amount of additional spectrum – 800 MHz or more – will be necessary to meet consumer demand in the

¹ See Public Notice, *Comment Sought on Spectrum for Broadband*, DA 09-2100, GN Docket Nos. 09-47, 09-51 & 09-137 (rel. Sept. 23, 2009) (“*Public Notice*”). WISPA filed Comments in response to NBP #6 on October 23, 2009 (“WISPA Spectrum Comments”).

next six years.² These interests often sound a common theme – that this new spectrum would serve the needs of subscribers who will be loading their mobile devices with ever-more applications. They also assert that additional spectrum is needed to permit wireless companies to better compete with each other.³

Nowhere, however, does the mobile wireless industry address the need to provide fixed broadband services to Americans who are now unable to access affordable broadband in their homes because (a) “middle mile” or “second mile” facilities are unavailable or unaffordable, (b) the expense of towers and rooftops serves as a barrier to network deployment for wireless service providers, or (c) access to adequate low-frequency, interference-free spectrum is out of reach for WISPs. WISPs today serve areas where other technologies can not and will not reach, and increasing interference in the license-exempt bands jeopardizes WISPs’ ability to provide service to otherwise unserved areas. Thus, the Commission cannot afford to allocate 800 MHz of additional mobile wireless spectrum without addressing the particular challenges of providing fixed wireless spectrum for these unserved and underserved areas; otherwise, many Americans will continue to find themselves relegated to dead zones without any broadband access.

Certain spectrum bands, if appropriately licensed and allocated, offer near-term opportunities for enabling expanded fixed wireless broadband coverage to these unserved and underserved areas. The TV white space rules should be amended as proposed in WISPA’s petition for reconsideration, a position that others also support.⁴ The rules for the 3650 MHz Service also should be modified to make them more conducive for wide-scale deployment. In addition to facilitating these short-term advantages, the Commission should, as WISPA and

² See, e.g., Comments of CTIA-The Wireless Association, Public Notice NBP #6, in GN Docket Nos. 09-51, 09-47 & 09-137 (filed Oct. 23, 2009) (“CTIA Comments”), at 2, 16.

³ *Id.* at 2.

⁴ See Petition for Reconsideration of WISPA in Dockets 04-186 & 02-380 (filed March 19, 2009).

others have urged, make spectrum available through non-exclusive “licensed lite” processes, especially for spectrum in rural, underserved and unserved markets. WISPA also urges the Commission to undertake an audit of its spectrum to identify “new” spectrum to allocate for fixed wireless broadband.

I. WISPA SUPPORTS RULES THAT PROMOTE DEPLOYMENT OF COST-EFFECTIVE, WIDE-AREA FIXED TV WHITE SPACE DEVICES.

WISPA urged the Commission, in considering the specifics of a National Broadband Plan, to move quickly to adopt policies to enable cost-effective deployments of fixed devices in the TV white spaces.⁵ Among many proposals, WISPA asked the Commission to increase the maximum antenna height for TV band device (“TVBD”) base stations from 30 meters above ground to 100 meters above ground, based on a proposed table of required separation distances from protected contours, and to remove the 30-foot minimum CPE antenna height. Further, WISPA supported increasing the power limit for TVBD base stations from 4 Watts EIRP to a maximum of 20 Watts based on a sliding scale whereby higher power levels would be permitted only in uncongested rural areas. Service quality can be improved and interference concerns mitigated through the adoption of “licensed-lite” requirements for fixed TVBD services, whereby the Commission would require TVBD operators to examine the geolocation database prior to commencing service and to cooperate with other licensees to avoid interference. The Commission should act quickly to implement its geolocation database administration process to expedite the deployment of fixed services in the TV white spaces. These changes would help ensure that the anticipated benefits of the TV white space spectrum will result in widespread fixed deployments that enable affordable broadband access.

⁵ See WISPA Spectrum Comments at 8-10.

WISPA has demonstrated that, especially in rural areas, fixed wireless services provide the primary means for cost-effective broadband deployments for rural consumers with broadband service comparable to service available in urban areas. WISPA agrees with the Association for Maximum Service Television, the National Association of Broadcasters and others that “with appropriate technical protections fixed broadband services can operate in this spectrum without undermining consumers’ access to free, over-the-air television or new mobile DTV services.”⁶ Yet in response to the *Public Notice*, some commenters urge the Commission to promote other uses that, on balance, would disserve the public interest and would leave many rural customers with little or no real choice for broadband. As described below, the Commission should reject these proposals.

A. Backhaul Services Do Not Represent The Highest and Best Use of the TV White Spaces.

While some commenters overstate the need for – and the efficacy of – devoting significant amounts of TV white spaces spectrum for backhaul services, others recognize that such services do not represent the highest and best use of this spectrum. WISPA believes that backhaul allocations in the TV white spaces would require too much power and too much spectrum such that WISP point-to-multipoint distribution services would be unduly and irrevocably harmed, to the detriment of consumers.

In this proceeding, Sprint Nextel, FiberTower, the Rural Telecommunications Group and COMPTTEL reiterate their support for a higher-powered, licensed, point-to-point service in the TV white spaces. These commenters support the uses of TV white spaces for backhaul to support other services and to purportedly “reduce the costs of wireless broadband backhaul by as

⁶ Comments of the Association for Maximum Service Television, Inc. and The National Association of Broadcasters in GN Docket Nos. 09-47, 09-137 & 09-51 (filed Oct. 23, 2009), at 13 (“MSTV/NAB Comments”).

much as 80-90%,”⁷ and propose 6 MHz fixed use channels operating on TV channels 21-35 and 39-51. Sprint Nextel characterizes this spectrum as “ideal for backhauling traffic over very long distances,” while MSTV/NAB have stated that the white spaces “presumably” could have a role for backhaul in rural areas.⁸

WISPA, like others, believes that backhaul services do not represent the highest and best use of this spectrum and, in fact, the Commission should not adopt service rules that unduly limit the potential for fixed point-to-multipoint broadband services using TV white spaces. Motorola, for example, states that the “characteristics that make the [TV white spaces] spectrum well suited to providing rural broadband services also make it less than ideal to be used for backhaul services.”⁹ As Motorola stated, the “longer wavelength in lower frequency bands would mean that significantly larger antenna [*sic*] would be needed to efficiently provide a point-to-point backhaul service.”¹⁰ Thus, while Sprint Nextel, *et al.*, tout the reasons why they believe white space spectrum would be more cost-effective for them to deploy backhaul services, they disregard the associated deployment costs and spectrum inefficiencies associated with the use of such larger antennas and the opportunity costs of service rules that grant an unwarranted preference to backhaul uses instead of fixed, point-to-multipoint services directly to consumers. As WISPA demonstrated, the demand for such service in rural areas, and the limitations of broadband availability in such areas, compels the need for more spectrum.¹¹

WISPA believes that while TV white space spectrum is ideal for deploying fixed broadband services, mandating the use of this spectrum for backhaul would undermine the

⁷ Comments of Sprint Nextel Corporation, Public Notice NBP #6, GN Docket Nos. 09-47, 09-51 & 09-137 (filed Oct. 23, 2009) (“Sprint Nextel Comments”), at 15.

⁸ MSTV/NAB Comments at 13.

⁹ See Comments of Motorola, Inc., Public Notice NBP #6, GN Docket Nos. 09-47, 09-51 & 09-137 (filed Oct. 23, 2009) (“Motorola Comments”), at 18.

¹⁰ *Id.*

¹¹ See WISPA Comments at 2-5.

delivery of fixed broadband deployments directly to consumers in unserved and underserved areas. Sprint Nextel, *et al.*, focus on the service provider's cost efficiencies associated with using the spectrum for backhaul, but any such efficiencies must be weighed against the opportunity cost of precluding uses of the spectrum for point-to-multipoint fixed services. Cost-effective deployments are crucial to give WISPs the means to provide services in areas with low population density, and the non-line-of-sight propagation characteristics of TV white spaces spectrum fulfill this important goal. WISPA supports rule changes that would improve the efficiency of existing microwave bands for point-to-point backhaul services,¹² but believes that such services should not be permitted in the TV white spaces. Moreover, WISPA, like others, believes that the long-term needs of backhaul providers can be well served by the use of frequency bands above 6 GHz and WISPA supports improving flexible service rules to facilitate such deployments.

B. Proposals for A “Spectrum Innovation Band” are Too Vague and Untimely for Action in this Proceeding.

WISPA also opposes Flinn Broadcasting Corporation's (“Flinn”) proposal for new services (listed as “broadband delivery, alternate forms of broadcasting, or other communications services that entrepreneurs may seek to deploy”) in what it calls a “Spectrum Innovation Band” using low VHF Channels 2-6.¹³ Irrespective of the purported challenges of this spectrum, WISPA believes that this four-page proposal is incomplete and too vague to be implemented quickly and effectively. There is only scant mention of protection of existing services or of facilitating broadband to consumers. Moreover, while Flinn states that the Commission's record indicates that white space equipment manufacturers are “likely to focus on the UHF spectrum,

¹² See Motorola Comments at 18.

¹³ Comments of Flinn Broadcasting Corporation, Public Notice NBP #6, GN Docket Nos. 09-47, 09-51 & 09-137 (filed Oct. 23, 2009).

leaving the low-band VHF channels behind,” such a conclusion is not a given and WISPA anticipates that there will be significant opportunities for WISP use of this new spectrum. For these reasons, WISPA does not support Flinn’s proposal.

II. WISPA SUPPORTS “LICENSED LITE” APPROACHES TO SPECTRUM ALLOCATION.

In its Comments, WISPA discussed some of the serious problems presented by use of unlicensed devices in the 900 MHz, 2.4 GHz and 5 GHz bands, the prime bands in which WISPs serve their subscribers. Prominent among these is the increasingly “noisy” environment that threatens the ability of WISPs to continue to serve existing subscribers and deters expansion of fixed wireless broadband networks to unserved and underserved areas.¹⁴ WISPA also demonstrated that spectrum made available through the traditional auction methods is out of reach for many WISPs who have the opportunity, but not the means, to serve areas where other technologies cannot or where providers do not.

To address these spectrum hurdles – which will only worsen as subscribership and consumer bandwidth needs increase – WISPA proposed expanded use of a third spectrum allocation approach – the “licensed lite” licensing mechanism. WISPA believes that such a licensing scheme should be adopted for other bands as a way to build upon the successes of the 3650-3700 MHz band, especially for rural markets where the lowered market entry costs would help offset high per-subscriber costs resulting from the lack of affordable middle mile and second mile connectivity and the sparse population.

The American Petroleum Institute (“API”) noted these same problems with noise in the unlicensed bands and reiterated its concerns about “how growing interference concerns in the license-exempt bands, particularly the 902-928 MHz band, threaten the ability of the oil and

¹⁴ See WISPA Spectrum Comments at 5.

natural gas industry to satisfy requirements for point-to-multipoint communications.”¹⁵

Similarly, Covad Wireless concluded that “[t]he 900 MHz band does not contain sufficient spectrum to provide broadband communications and is heavily used by cordless telephones and other devices.”¹⁶ The 902-928 MHz band is a primary band used by WISPs, and it is clear from both WISPA and API that the existing congestion will continue to present service difficulties for both WISP subscribers and the oil and gas industries, and will also prevent expanded service. API’s Comments highlight the inherent and increasing interference issues in unlicensed bands.

To its credit, Covad Wireless recognizes the need for additional spectrum to meet demand for “the projected increase in bandwidth-intensive applications for fixed wireless networks.”¹⁷ It also acknowledges that, like the 900 GHz band, the 2.4 GHz unlicensed band is “congested and used by wireless routers and other operations” and the 5 GHz license-exempt band “is quickly becoming overused.”¹⁸ In a similar vein, Clearwire observes that unlicensed networks “are necessarily power-limited and provide less certainty and interference protection.”¹⁹

¹⁵ Comments of the American Petroleum Institute, Public Notice NBP#6, GN Docket Nos. 09-47, 09-51 & 09-137 (filed Oct. 23, 2009), at 2.

¹⁶ Comments of Covad Communications Company (“Covad Wireless”), Public Notice NBP#6, GN Docket Nos. 09-47, 09-51 & 09-137 (filed Oct. 23, 2009), at 4.

¹⁷ *Id.* at 3-4.

¹⁸ *Id.* at 4. The 255 MHz of unlicensed spectrum in the 5470-5725 MHz band is virtually useless for outdoor WISP networks because operators must utilize dynamic frequency control (DFS) to avoid interfering with radar systems. WISPA also is aware that the Commission, NTIA and the FAA are investigating the extent to which unlicensed devices in the 5600-5650 MHz band are causing interference to Terminal Doppler Weather Radar (“TWDR”) systems, which are deployed at 45 locations nationwide. The investigation grew out of interference that the FAA claims has been occurring in the last two years near TWDR systems across the United States, including severe interference at San Juan, Puerto Rico. The agencies are meeting with industry representatives to seek a solution to such interference. One potential solution would establish a 30 MHz buffer on each side of the 5600-5650 MHz band, limiting use of unlicensed devices in 110 MHz of unlicensed spectrum. *See, e.g.*, NTIA Presentation, “Examination of Interference to Terminal Doppler Weather Radar Systems,” Oct. 30, 2009. The potential interference is further evidence of the increasing inability to reliably use unlicensed spectrum for commercial deployment.

¹⁹ Comments of Clearwire Corporation, Public Notice NBP#6, GN Docket Nos. 09-47, 09-51 & 09-137 (filed Oct. 23, 2009) (“Clearwire Comments”), at 4.

To address these recognized challenges, rather than proposing a “licensed lite” solution, Covad Wireless suggests designation of additional *unlicensed* spectrum between 3 GHz and 5 GHz for fixed services. Clearwire similarly asserts that the Commission should allocate “ample spectrum for unlicensed use” to “always exist alongside of substantial licensed bands.”²⁰ Although WISPA agrees that additional, affordable spectrum is a critical need, in each case, these proposed solutions would simply perpetuate the inherent interference constraints that are so characteristic of unlicensed spectrum and put off the inevitable congestion that is already present in unlicensed bands. The problems of access to broadband in rural, unserved and underserved areas deserve more than a temporary band-aid – these problems deserve a “licensed lite” solution that will better manage potential interference and enable higher-quality service.

AT&T ignores entirely the interference problems in unlicensed fixed bands, stating simply that “the spectrum needs of the unlicensed community have been more than amply addressed by the Commission.”²¹ While perhaps AT&T’s argument is true with respect to unlicensed mobile markets or Wi-Fi hot spots, it is not “well-positioned”²² to comment on the interference issues that WISPs experience everyday, the spectrum needs of high-power, subscription based fixed wireless WISP service and the benefits that fixed wireless WISPs provide in the communities AT&T has elected not to serve. The Commission also should not be misled by AT&T’s bald assertion that “the U.S. makes more than twice as much unlicensed spectrum available as licensed spectrum, an amount that far exceeds that in other industrialized countries”²³ or Verizon Wireless’ statement that “it is not aware of any factual basis for the Commission to consider additional spectrum allocations for unlicensed use beyond the

²⁰ *Id.*

²¹ Comments of AT&T Inc., Public Notice NBP#6, GN Docket Nos. 09-47, 09-51 & 09-137 (filed Oct. 23, 2009), at 14.

²² *Id.* at 13.

²³ *Id.* at 14.

substantial amounts already reserved.”²⁴ Neither AT&T nor Verizon Wireless attempts to break down unlicensed spectrum allocations into their potential uses, so their statements about the *quantity* of usable spectrum, especially to the extent they may be opining on spectrum for fixed wireless broadband, cannot be given any credibility. Moreover, they miss the larger marketplace realities experienced by WISPs, API and Covad Wireless that unlicensed spectrum for wide-area, fixed wireless systems lacks *quality* – the unlicensed spectrum the Commission has made available for fixed wireless is of decreasing utility to WISPs, the communities they serve and other areas that would benefit from fixed wireless broadband services.

The solution is not to retain the *status quo* for unlicensed spectrum while making more spectrum available via auction, but to allocate additional spectrum for fixed broadband under a “licensed lite” regime. Like other commenters,²⁵ WISPA believes that the current “licensed lite” approach of the 3650-3700 MHz band provides an excellent model for improving delivery of rural broadband services and that there is growing demand for 3650-3700 MHz-style service and for spectrum-allocation policies developed on such hybrid licensing models. While some commenters believe that the 3650 MHz Service “has not generated significant business activity to date,”²⁶ in fact the opposite is true. As Motorola pointed out, “[t]here is growing demand for fixed wireless broadband in the ‘licensed lite’ 3650 MHz band” which “is poised to play a significant role in advancing broadband deployment in unserved and underserved areas.”²⁷

The 3650 MHz Service provides a means to facilitate the provision of service in rural areas with low population density by reducing entry barriers while simultaneously affording

²⁴ Comments of Verizon Wireless, Public Notice NBP#6, GN Docket Nos. 09-47, 09-51 & 09-137 (filed Oct. 23, 2009), at 11.

²⁵ See Motorola Comments at 16-17.

²⁶ Comments of Shure Incorporated, Public Notice NBP#6, GN Docket Nos. 09-47, 09-51 & 09-137 (filed Oct. 23, 2009), at 12. As stated in the WISPA Spectrum Comments, the Commission has authorized more than 1,100 non-exclusive licenses and accepted more than 3,800 registrations.

²⁷ Motorola Comments at 16-17.

interference protection. WISPA believes that any judgment of the successes of the “licensed lite” approach should not turn on whether such licensing generates “significant business,” however defined – to the contrary, the service can serve as an effective vehicle for services in areas that are remote, sparsely populated or otherwise underserved with broadband.

III. WISPA SUPPORTS ALLOCATION OF ADDITIONAL SPECTRUM FOR FIXED WIRELESS BROADBAND.

Numerous commenters in this proceeding support the allocation of additional broadband spectrum, but there are sharp differences among commenters about how much spectrum should be allocated, for what purposes and in what bands. As noted in WISPA’s Comments, assuming spectrum resources can be uncovered, WISPA believes that 300 MHz of spectrum will be needed for fixed wireless broadband to combat increasingly noisy environments and to meet consumer demands for bandwidth-intensive applications.

Some parties request additional spectrum, but emphasize mobile broadband uses over fixed services such as those provided by WISPs; accordingly, WISPA opposes allocations that would leave insufficient spectrum for such fixed services. For example, CTIA has asked FCC to identify and allocate an additional 800 MHz or more of spectrum below 3 GHz for licensed commercial wireless use, but CTIA would have the Commission minimize the importance of fixed wireless services.²⁸ Similarly, T-Mobile requests allocation and auction of an additional 800 MHz for commercial mobile broadband use, with no mention of the impact on fixed services such as those provided by WISPs.²⁹ Qualcomm supports the general proposition that more spectrum should be made available for wireless broadband.³⁰

²⁸ See CTIA Comments at 16-17.

²⁹ See Comments of T-Mobile USA, Inc., Public Notice NBP#6, GN Docket Nos. 09-47, 09-51 & 09-137 (filed Oct. 23, 2009) (“T-Mobile Comments”).

³⁰ See Comments of Qualcomm, Inc., Public Notice NBP#6, GN Docket Nos. 09-47, 09-51 & 09-137 (filed Oct. 23, 2009), at 23.

WISPA can support the theoretical need for more spectrum for both mobile and fixed wireless broadband services, but unlike many of these commenters, WISPA urges the Commission to acknowledge the importance of fixed wireless broadband services and to make adequate and sufficient spectrum available for efficient and affordable deployment and operation of such services.

In determining what spectrum should be allocated for fixed services, WISPA disagrees with MSTV/NAB that “[f]ixed wireless broadband access can be provided efficiently over higher-frequency spectrum, such as that widely available in the 5 GHz band and as high as the 70/80/90 GHz band.”³¹ The shorter propagation characteristics in higher-frequency bands drive up network deployment and operational costs by requiring more towers, more transmitters, more middle mile and second mile links, more electricity and more maintenance. The increased capital and operational expenses inherent in higher-frequency bands will make it extremely difficult, if not impossible, for WISPs to utilize. In essence, the Commission would be replacing one problem – congestion and inadequate unlicensed spectrum – with another – spectrum that is too expensive to deploy in the rural areas that are most in need of fixed wireless broadband service.

WISPA requests that up to 300 MHz of new spectrum for fixed wireless services be made available in bands below 3 GHz. By obtaining this spectrum via “licensed lite” allocation rules, operators of fixed wireless networks would be able to provide affordable and efficient broadband service to Americans that are most in need. Rather than short-changing the public, the Commission should recognize the vital and singular role that fixed wireless services play in bringing service to consumers and businesses in rural, sparsely populated and remote areas.

³¹ MSTV/NAB Comments at 6.

IV. THE RECORD DEMONSTRATES BROAD SUPPORT FOR AN AUDIT OF COMMISSION SPECTRUM.

Before the Commission can entertain allocating spectrum for fixed and mobile purposes, it must first identify the sources of “new” spectrum. It is therefore not surprising that a large number of commenters ask the Commission to conduct a spectrum audit to quickly identify and reallocate spectrum for broadband.³² If Congress does not direct the Commission and/or NTIA to audit spectrum, WISPA agrees that the agencies should undertake the inventory without legislative mandate.

WISPA agrees with the general premise of Sprint Nextel’s recommendation that the Commission should undertake a “geographically granular” analysis of the needs of different geographic areas before it reallocates spectrum.³³ WISPA believes, however, that the Commission’s analysis should also consider the means by which spectrum can be provided to all areas of the country, regardless of bandwidth needs, in ways that are affordable. While not all rural areas are the same, as Sprint Nextel points out, it is generally true that the more sparse the population, the more expensive it will be to provide broadband service. Thus, any examination of the demands of consumers tells only half the story – the Commission also must assess the supply of broadband infrastructure to an area and consider ways to ease the entry barriers, make broadband affordable and increase digital literacy.

³² See, e.g., Motorola Comments at 21; T-Mobile Comments at 15; Sprint Nextel Comments at 26; Comments of the Consumer Electronics Association, Public Notice NBP#6, GN Docket Nos. 09-47, 09-51 & 09-137 (filed Oct. 23, 2009), at 1-2.

³³ Sprint Nextel Comments at 25.

V. THE COMMISSION SHOULD TAKE STEPS TO ENABLE EXPEDITIOUS AND AFFORDABLE ACCESS TO TOWERS.

WISPA agrees with Clearwire that the Commission can and should enhance the ability of broadband providers to access towers and other structures.³⁴ As WISPA has previously demonstrated,³⁵ WISPs often are unable to gain access to towers on fair and non-discriminatory terms. As a first step, the Commission should adopt its “tentative conclusion” to afford broadband providers the right to attach to utility poles on just, reasonable and non-discriminatory terms and conditions.³⁶ In addition, the Commission should adopt WISPA’s proposals to expedite access to infrastructure owned by the federal government by establishing a national database of towers, conduits, ducts, rights-of-way and other assets and streamlining the lease approval process.³⁷

³⁴ See Clearwire Comments at 3.

³⁵ See WISPA Comments in *A National Broadband Plan for Our Future*, GN Docket No. 09-51, filed June 8, 2009; WISPA Comments in response to Public Notice, “*Comment Sought on the Contribution of Federal, State, Tribal, and Local Government to Broadband*,” DA 09-2122, GN Docket Nos. 09-47, 09-51 & 09-137 (rel. Sept. 25, 2009), filed Nov. 6, 2009 (“WISPA Government Assets Comments”).

³⁶ See *Implementation of Section 224 of the Act; Amendment of the Commission’s Rules and Policies Governing Pole Attachments*, 22 FCC Rcd 20195, 20209 (2007).

³⁷ See WISPA Government Assets Comments at 3-4.

Conclusion

WISPA believes that the need for fixed wireless broadband will continue to expand, especially in rural, remote and sparsely populated areas where people are unserved or underserved. Through a combination of additional spectrum, increased use of “licensed lite” spectrum allocation and more effective service rules, these demands can be met. WISPA urges favorable consideration of its proposals as the Commission fulfills the important obligation of developing a National Broadband Plan.

Respectfully submitted,

**THE WIRELESS INTERNET
SERVICE PROVIDERS ASSOCIATION**

November 13, 2009

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