

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

In the Matter of	)	
	)	
Service Rules for Advanced Wireless Services in the 2000-2020 MHz and 2180-2200 MHz Bands	)	WT Docket No. 12-70
	)	
Fixed and Mobile Services in the Mobile Satellite Service Bands at 1525-1559 MHz and 1626.5- 1660.5 MHz, 1610-1626.5 MHz and 2483.5-2500 MHz, and 2000-2020 MHz and 2180-2200 MHz	)	ET Docket No. 10-142
	)	
Service Rules for Advanced Wireless Services in the 1915-1920 MHz, 1995-2000 MHz, 2020-2025 MHz and 2175-2180 MHz Bands	)	WT Docket No. 04-356
	)	

**REPLY COMMENTS OF THE PUBLIC INTEREST ORGANIZATIONS**

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New America Foundation, Public Knowledge and Consumers Union (collectively, “Public Interest Organizations”) hereby file these Reply Comments in response to the Commission’s Notice of Proposed Rulemaking and Notice of Inquiry in the above-captioned proceedings (“AWS-4 NPRM”).<sup>1</sup>

**I. THERE IS STRONG SUPPORT FOR PUBLIC INTEREST CONDITIONS THAT PROMOTE COMPETITION IF THE COMMISSION PROCEEDS TO TRANSFER COST-FREE AWS-4 LICENSES TO THE MSS INCUMBENT**

As stated in the initial Comments filed by the Public Interest Organizations in this proceeding,<sup>2</sup> Wall Street analysts estimate the incremental value of the cost-free AWS-4 license grant proposed in the *NPRM* to be on the order of \$4 to \$6 billion.<sup>3</sup> Despite the enormous market value of this Federal grant, the Commission proposes no set of conditions comparable to those associated with the LightSquared authorizations. The Public Interest Organizations note that a substantial number of comments concur with the thrust of our conclusion that the Commission must add substantial conditions, in addition to buildout requirements, to avoid unjust enrichment and to ensure that the public resource is actually used to promote competition, innovation and more affordable mobile broadband for the public.

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<sup>1</sup> *Service Rules for Advanced Wireless Services in the 2000-2020 MHz and 2180-2200 MHz Bands*, Notice of Proposed Rulemaking and Notice of Inquiry, WT Docket No. 12-70, ET Docket No. 10-142, WT Docket No. 04-356 (rel. March 21, 2012)(“AWS-4 NPRM”).

<sup>2</sup> See Comments of New America Foundation, Consumers Union, Public Knowledge, WT Docket No. 12-70, ET Docket No. 10-142, WT Docket No. 04-356 (filed May 17, 2012) (“Public Interest Organizations’ Comments”). Unless otherwise specified, all comments cited herein are initial comments filed in this docket on May 17, 2011.

<sup>3</sup> See Credit Suisse Equity Research, “Verizon: Spectrum Acquisition Positive for Spectrum Valuation Thesis; Positive for CLWR, Positive for DISH,” December 2, 2011 (noting that the price paid by Verizon for SpectrumCo AWS spectrum “would value DISH Spectrum at \$8.6 billion”). Wells Fargo Research valued the combined DBSD and TerreStar spectrum at \$4-to-\$5 billion. See Evelyn Rusli, “Dish Network Nearer to Winning TerreStar,” *Dealbook*, NYTimes.com, (June 28, 2011), available at <http://dealbook.nytimes.com/2011/06/28/dish-network-nearer-to-winning-terrestrial/> (citing Marci Ryvicker, Wells Fargo Research Report, June 28, 2011). See also Comments of MetroPCS Communications Inc. (“MetroPCS”) at 26, comparing the average \$0.23 MHz/POP price paid by DISH last year for its 40 MHz S Band spectrum compared to the current market benchmark of \$0.68 per MHz/POP.

Comments filed by several competitive carriers and their trade association correctly point out that the Commission’s proposed grant of fully-flexible licenses for 40 MHz of prime spectrum nationwide to the MSS incumbents is likely to result in unprecedented unjust enrichment for a single company in the absence of competitive bidding or, at a minimum, conditions likely to enhance market competition and protect against further consolidation of the wireless industry. MetroPCS opposes the proposed cost-free grant of AWS-4 licenses on the grounds that DISH Network Corporation (“DISH”) would receive “a substantial unwarranted windfall by converting their MSS licenses into 40 MHz of largely unfettered terrestrial licenses without competitive bidding or any return to the United States for the increased spectrum value.”<sup>4</sup> T-Mobile, which also supported competitive bidding, observes that “[t]he Commission has long maintained a policy against granting windfalls to a single party to avoid marketplace distortions and unjust competitive advantages.”<sup>5</sup> And in its comments, RCA—The Competitive Carriers Association advocates conditions, including an unjust enrichment penalty modeled after the Commission’s Designated Entity program, to prevent “an unjustified windfall at the expense of competitive carriers that are forced to acquire additional spectrum at auction.”<sup>6</sup>

Although a number of commenters propose competitive bidding as the appropriate alternative to unjust enrichment, the primary thrust of comments by both competitive carriers and the Public Interest Organizations is the need for additional conditions that promote rather than undermine competition and consumer choice in the rapidly consolidating wireless market. Two conditions supported by RCA and by the Public Interest Organizations stand out in this regard: a requirement that AWS-4 licensees offer wholesale leasing and roaming on at least a substantial

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<sup>4</sup> Comments of MetroPCS, at 2.

<sup>5</sup> Comments of T-Mobile USA, Inc. (“T-Mobile”) at 18.

<sup>6</sup> Comments of RCA—The Competitive Carriers Association (“RCA”) at 4, 11.

portion of its network capacity; and a requirement that AWS-4 licensees must seek Commission approval before making more than 25 percent of data traffic capacity within any Economic Area available to any single carrier or other entity.<sup>7</sup>

The Public Interest Organizations concur with RCA that “[t]he Commission should require DISH to offer wholesale and roaming agreements that advance the public interest.”<sup>8</sup> A condition along these lines was supported in the comments of a range of wireless providers, particularly more rural carriers that face enormous obstacles to securing affordable roaming arrangements.<sup>9</sup> Although this condition will yield a very direct and substantial public interest benefit for consumers of wireless services, particularly outside major metropolitan areas, the Public Interest Organizations believe there is no reason that a wholesale access and/or roaming condition needs to be limited to competitive carriers. Guaranteed access to wireless service on either a wholesale or roaming basis would result in compelling public interest benefits for not only competitive carriers and their subscribers, but also for device makers, retailers, wireless service providers and other innovators and entrepreneurs. The Commission recognized the extensive potential public interest benefits of a nationwide wholesale access provider in the public interest analysis accompanying its Order granting the transfer of SkyTerra’s MSS licenses to Harbinger Capital Partners’ Fund (later LightSquared):<sup>10</sup>

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<sup>7</sup> *Ibid.* at 6-8; Comments of Public Interest Organizations at 8-11. *See also* Comments of T-Mobile at 3 (“The Commission should require the AWS-4 licensee to obtain prior approval . . . before entering into any wholesale agreements that would require . . . more than a certain percentage (i.e., 25 percent) of its total terrestrial network capacity for traffic of another wireless carrier.”)

<sup>8</sup> Comments of RCA at 7.

<sup>9</sup> *See* Comments of the National Telecommunications Cooperative Association at 3 (“consumers will be best served if the Licensee is required as condition of the license and the new rules to offer reciprocal roaming to small, rural mobile wireless providers on terms and conditions that are no less favorable than what it offers its other roaming partners”).

<sup>10</sup> *See In the Matter of SkyTerra Commc’ns, Inc., Transferor, and Harbinger Capital Partners Funds,*

. . . Harbinger [LightSquared] could have a beneficial impact on competition not only through its role as an additional facilities-based provider of mobile broadband service. For example, it could be a wholesale provider of these services for mobile resellers (Mobile Virtual Network Operators (MVNOs)), smart grid networks, and potentially for mass market consumer devices, such as the Kindle. . . . It will help enhance competition among current mobile wireless providers. Through Harbinger's role as a wholesale provider, it may be a catalyst for market-changing developments in the use and sale of innovative new mass-market consumer devices.

Although DISH has asserted that, unlike LightSquared, it intends to operate its network based on a retail business model, a requirement that it also offer wholesale and roaming at fair and reasonable rates is a modest "price" for the AWS-4 band incumbent to pay in exchange for the \$4 to \$6 billion in public spectrum subsidies that it seeks. Rather than relinquish 50 percent of the AWS-4 band for reassignment by competitive bidding, as T-Mobile and MetroPCS propose, the public interest in market-wide competition, innovation and consumer choice would be better served if the AWS-4 licensee made up to 50 percent of a more robust 40 MHz advanced LTE network available on non-discriminatory and reasonable terms for wholesale leasing and roaming.

The Public Interest Organizations also generally concur with RCA's proposal that the Commission "should implement a condition that licensees not be permitted directly or indirectly to provide via their terrestrial networks, to any combination of the largest and second largest wireless providers, traffic accounting for more than 25 percent of the total bytes of data carried over that network without prior Commission approval."<sup>11</sup> RCA correctly notes that the Commission imposed a virtually identical condition on the transfer of Skyterra's MSS spectrum

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*Transferee, Applications for Consent to Transfer Control of SkyTerra Subsidiary, LLC*, IB Docket No. 08-184, Memorandum Opinion and Order and Declaratory Ruling, 25 FCC Rcd. 3059, 3089, ¶ 62 (2010) ("SkyTerra Order").

<sup>11</sup> Comments of RCA at 7.

which would have prohibited LightSquared from entering into any agreement that made its terrestrial network capacity available to the largest or second largest wireless provider without receiving prior Commission approval.<sup>12</sup> In the two years since the Commission imposed that condition, both CMRS spectrum holdings and market shares have become steadily more concentrated, making a review and approval condition more justifiable and necessary than ever.

Although the public interest benefit of this condition would focus primarily on deterring the AWS-4 licensee from leasing all or a substantial portion of this subsidized spectrum to the dominant nationwide carriers, there is no need for the Commission to limit the condition to the two largest carriers. As T-Mobile and the Public Interest Organizations argue, this condition could apply generically to any lease or wholesale arrangement with any entity.<sup>13</sup> In its comments, T-Mobile observes that unlike the condition in the 2010 LightSquared Order, “this would not be limited to the two largest wireless carriers but would apply neutrally to any wholesale arrangements above the specified threshold with any entity.”<sup>14</sup>

**II. THE RETURN OF 20 MHZ FOR AUCTION IS NOT NECESSARY TO AVOID UNJUST ENRICHMENT, MAY DETER A POTENTIAL MARKET ENTRANT, AND IS IN ANY CASE INFERIOR TO THE MARKETWIDE COMPETITIVE BENEFITS OF A WHOLESALE/ROAMING MANDATE**

Several wireless providers support some form of competitive bidding as the most fair and pro-competitive means of reassigning at least a portion of the new AWS-4 license rights. At least two major wireless providers – T-Mobile and MetroPCS – propose that a legally permissible alternative to an incentive auction would be a condition requiring the MSS

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<sup>12</sup> Comments of RCA at 8. *See SkyTerra Communications, Inc. and Harbinger Capital Partners Funds, Applications for Consent to Transfer of Control of SkyTerra Subsidiary, LLC*, Memorandum Opinion and Order and Declaratory Ruling, 25 FCC Rcd 3059, Attachment 2 (conditions) (IB, OET, WTB 2010).

<sup>13</sup> Comments of T-Mobile at 7; Comments of Public Interest Organizations at 11

<sup>14</sup> Comments of T-Mobile at 7.

incumbents to relinquish half of their spectrum (20 MHz) in exchange for the new grant of fully-flexible AWS-4 licenses for the 20 MHz retained.<sup>15</sup> That approach would be both “voluntary” and avoid the complications that would occur if AWS-4 licenses were auctioned and acquired subject to the MSS operating rights held by the incumbent MSS licensees. In addition to receiving AWS-4 licenses for 20 MHz, DISH would retain the ability to offer mobile satellite services on either a stand-alone or integrated basis.<sup>16</sup>

The Public Interest Organizations do not agree that dividing the AWS-4 band and reassigning 20 MHz by auction best serves the public interest in promoting more wireless broadband competition, innovation and consumer choice for several reasons. First, while it may be most “fair” to require the incumbent MSS licensee to relinquish 20 MHz for reassignment in exchange for fully-flexible AWS-4 licenses on the other 20 MHz, the Public Interest Organizations maintain that competition and consumer choice would benefit to a greater degree if, instead, up to 50 percent of the capacity of the 40 MHz AWS-4 band is made available on non-discriminatory and reasonable terms to *any* competitive carrier or other service provider.

Second, if the Commission adopts the wholesale access and unjust enrichment conditions proposed by RCA and the Public Interest Organizations, it becomes far more likely that DISH will continue to own and deploy its network, rather than selling the spectrum to one of the two dominant carriers. Certainly the sale of the AWS-4 band would become less attractive to both DISH *and* the dominant carriers if (a) the AWS-4 licensee(s) must pay back a substantial portion of their unjust enrichment, and (b) the carrier acquiring AWS-4 spectrum is bound by mandatory

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<sup>15</sup> Comments of T-Mobile at 17-23; Comments of MetroPCS at 30-31.

<sup>16</sup> Comments of T-Mobile at 23-24.

wholesale and roaming conditions, at fair and reasonable rates, on a substantial share of network capacity (e.g., up to 50 percent in each Economic Area).

Third, regardless whether DISH or some other carrier ultimately controls the AWS-4 band, a new facilities-based buildout and/or a new market entrant is far likely to occur based on a paired band of 40 MHz. Dividing the band into separate 20 MHz license blocks would virtually guarantee that the spectrum would end up in the hands of an existing carrier rather than enhancing competition for the overall market by leading to a new entrant (as DISH claims it intends) and/or open wholesale and roaming access for all parties (as RCA and the Public Interest Organizations propose). The consumer value of a deployment of advanced LTE would also be greatly enhanced on a larger (40 MHz) block of spectrum.

### **III. STRINGENT ‘USE IT OR LOSE IT’ PENALTIES WOULD BE LESS NECESSARY IF A ‘USE IT OR SHARE IT’ CONDITION PERMITS OTHERS AT LEAST TEMPORARY USE OF FALLOW 2 GHZ SPECTRUM**

The comments filed in this proceeding evidence considerable disagreement with the Commission’s proposed penalties for failure to meet the modest buildout requirements it would require in connection with AWS-4 licenses.<sup>17</sup> For example, CTIA argues the Commission’s proposal to automatically terminate all of the licensee’s AWS-4 authorizations for failure to meet interim buildout requirements, and to terminate individual license service area authorizations for failure to meet final buildout requirements, are “unduly burdensome and potentially harmful not only to licensees but also to potential consumers of the new service.”<sup>18</sup> Similarly, CCIA asserts

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<sup>17</sup> *AWS-4 NPRM* at ¶90-98.

<sup>18</sup> Comments of CTIA—The Wireless Association at 8.

that the proposed penalties for failure to meet what it deems to be “overly aggressive” and “draconian” buildout requirements are “unnecessarily punitive.”<sup>19</sup>

The Public Interest Organizations do not agree that the Commission’s proposed buildout benchmarks are overly aggressive in light of the below-market cost of the AWS-4 spectrum that is being granted. Whether or not the Commission decides to reclaim the AWS-4 licenses in their entirety for failure to meet *interim* buildout requirements (30 percent of total AWS-4 population within three years), it seems reasonable and consistent with efficient spectrum use to reclaim the AWS-4 licenses that correspond to particular service areas where the licensee fails to meet final buildout requirements. The final buildout requirements give the licensee seven years to cover 70 percent of the population in a service area – and if the AWS-4 licensee has not built out a particular Economic Area to at least that degree after seven years, it is reasonable to transfer the license to a provider that will.

Even if the Commission adopts its allegedly “draconian” buildout requirements and forfeiture penalties, since the 40 MHz AWS-4 band today is almost entirely devoid of productive use, after *seven years* many primarily rural and small town areas will experience *no service at all* even if the licensee meets the minimum buildout requirements. AWS-4 licensees can serve 70 percent of the population in each license area and still leave the majority of rural and remote areas unserved. Worse, the spectrum would remain walled off from productive use by other providers during that entire period. Since spectrum capacity is infinitely renewable from second to second, this approach would lock in a waste of spectrum that could be used, even if only temporarily, in the public interest.

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<sup>19</sup> Comments of the Computer and Communications Industry Association (“CCIA”) at 6, 8. *Accord*, Comments of AT&T Inc. at 13 (“AT&T proposes that a ‘keep-what-you-use’ rule should apply at the buildout deadline consistent with the practice in other commercial mobile bands”).

New Commission policies and technologies do provide an alternative to locking in a waste of the spectrum resource during the period that the AWS-4 spectrum lies fallow in particular discrete areas. As the Public Interest Organizations proposed in their Comments in this proceeding, the Commission should augment its buildout requirements with a “use it or share it” license condition that would permit other parties to make use of unused AWS-4 spectrum on a localized basis until such time as the licensee actually deploys service. The frequency bands covered by the new AWS-4 licenses should be registered in the TV Bands Database and available for non-interfering use by devices and/or systems that are multi-band, equipped with GPS, capable of periodically checking the database, and on notice that they will be denied permission to continue using the AWS-4 frequencies in a local area once the licensee notifies the Commission and a TV Bands Database operator of the geographic areas where actual service will commence. Because the AWS-4 licensee is held harmless – and particularly because the AWS-4 licensee is receiving the spectrum on a subsidized basis – it should have no basis for opposing such a sensible condition.

#### **IV. THE COMMISSION SHOULD CONSIDER EXPLICIT RECEIVER INTERFERENCE LIMITS**

One important issue largely overlooked in the comments filed to date is the question of receiver performance requirements. A critical lesson learned from the recent LightSquared fiasco is the tremendous loss of potential consumer welfare and spectrum efficiency when one licensee or industry (in that case, the GPS industry) is permitted by the lack of receiver performance rules to effectively expropriate neighboring spectrum bands and impose massive opportunity costs on the general public. We therefore commend the Commission for explicitly raising this issue.

The Public Interest Organizations generally concur with the comments filed by Pierre de Vries of the Silicon Flatirons Center at the University of Colorado, Boulder.<sup>20</sup> His comments explain the important distinction between defining receiver interference limits and imposing receiver standards. As de Vries and FCC staff economists Evan Kwerel and John Williams have pointed out, the rules governing new allocations of spectrum should anticipate and avoid the encumbrance of adjacent bands that are targeted for flexible use, even if those adjacent bands are currently fallow or unassigned.<sup>21</sup> The Commission should be as concerned about the level of permissible interference *into* the AWS-4 band as it is about interference *from* AWS-4 transmitters into other bands. The Public Interest Organizations agree that unless the Commission specifies an explicit receiver protection limit for devices using AWS-4 spectrum, below which the licensee cannot later claim harmful interference based on future deployments in neighboring bands, AWS-4 licensees and/or third-party equipment makers could have an incentive to deploy devices that would put unreasonable constraints on the future use of adjacent bands.

## **CONCLUSION**

The Public Interest Organizations support the Commission's efforts to make more flexible-use spectrum available for advanced wireless services, but also believe the broader public interest is best served by assigning new licenses in a manner explicitly designed to promote mobile industry competition and more extensive use of fallow spectrum. With that broader public interest goal in mind, the Public Interest Organization respectfully urge the Commission to ensure a return to the public from the proposed grant of AWS-4 licenses by

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<sup>20</sup> Comments of Pierre de Vries.

<sup>21</sup> *Ibid.* at 4; see Evan Kwerel & John Williams, *Forward-Looking Interference Regulation*, 9 J. on Telecomm & High Tech Law 501, 516 (2011).

including conditions the spectrum access and unjust enrichment conditions outlined in our comments above.

Respectfully Submitted,

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