

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 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
)	

COMMENTS OF T-MOBILE USA, INC.

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EXECUTIVE SUMMARY

T-Mobile USA, Inc. (“T-Mobile”) commends the Commission for proposing to eliminate existing restrictions on the provision of terrestrial services in the 40 MHz of newly-proposed AWS-4 spectrum and allow flexible use of the spectrum. Such a change could hasten the day when this woefully underutilized spectrum is deployed to support the delivery of mobile broadband services. However, T-Mobile urges the Commission to take measures that will facilitate the prompt provision of competitive services in the AWS-4 band.

Specifically, the Commission should require the initial AWS-4 licensee to meet stricter network coverage milestones than those proposed by the Commission in the NPRM. T-Mobile’s proposed milestones are consistent with those that were imposed on LightSquared, another MSS licensee that recently sought to deploy terrestrial mobile broadband service in spectrum designated principally for MSS. Although the Commission recognizes the importance of build-out requirements, those proposed in the NPRM are not sufficient to ensure the prompt delivery of competitive mobile service in the AWS-4 band. The Commission should also require the AWS-4 licensee to obtain prior approval from the Commission before entering into any wholesale agreements that would require the AWS-4 licensee to reserve more than a certain percentage (*i.e.*, 25 percent) of its total terrestrial network capacity for traffic of another wireless carrier. Such a condition would help ensure that the AWS-4 spectrum is actually used to promote, rather than to limit, competition in the market for wireless broadband services. Another approach the Commission could take to facilitate the deployment of competitive service in the AWS-4 band would be to reassign at least 20 MHz of the AWS-4 spectrum through a competitive auction. Under this approach, the incumbent 2 GHz MSS licensee, DISH Network Corporation, would be given the opportunity to surrender to the Commission 20 MHz of its present spectrum assignment in return for receiving full terrestrial rights on the remaining 20 MHz. Such an approach would

accord with the Commission's longstanding policy of preventing windfalls, promote competition and diversity of ownership with respect to AWS-4 spectrum, raise a substantial amount of revenue for the U.S. Treasury, and give effect to the *National Broadband Plan's* framework for repurposing underutilized spectrum for mobile broadband use through competitive auctions.

Finally, the Commission should adopt technical rules that will protect existing and future PCS services operating in the 1930-1995 MHz band from harmful interference, and continue to give due consideration to how flexible use in the proposed AWS-4 band may adversely impact PCS operations.

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COMMENTS OF T-MOBILE USA, INC.

I. INTRODUCTION

T-Mobile USA, Inc. (“T-Mobile”) submits these comments in response to the Notice of Proposed Rulemaking and Notice of Inquiry (“NPRM”) issued by the Federal Communications Commission (“FCC” or “Commission”) in the above captioned proceeding.¹ In the NPRM, the Commission proposes to authorize terrestrial service, under flexible use rules, in 40 MHz of spectrum in the 2000-2020 MHz and 2180-2200 MHz spectrum bands currently assigned to the Mobile Satellite Service (“MSS”).² The Commission has cited “strong reasons” for assigning all of the AWS-4 spectrum to the incumbent MSS licensee, DISH Network Corporation (“DISH”).³

¹ Service Rules for Advanced Wireless Services in the 2000-2020 MHz and 2180-2200 MHz Bands, *Notice of Proposed Rulemaking and Notice of Inquiry*, IB Docket No. 12-70 (rel. Mar. 21, 2012) (“NPRM”).

² In accordance with the NPRM, these spectrum bands shall be referred to herein as “AWS-4” or “AWS-4 spectrum.” *See id.* ¶ 17.

³ *Id.* ¶ 71.

T-Mobile has long advocated FCC actions that designate scarce spectrum for terrestrial wireless service.⁴ Accordingly, T-Mobile supports the Commission’s decision to promote flexibility in the use of the 2 GHz MSS allocation, which “consists of a significant amount of bandwidth with propagation characteristics suitable for mobile broadband.”⁵ Flexible use could “encourage innovation and investment in mobile broadband,” and “provide a stable regulatory environment” that facilitates broadband deployment.⁶ However, the Commission should not grant such rights without imposing rigorous coverage requirements and traffic-related conditions on the incumbent MSS licensee. Specifically, given the unique circumstances of this proceeding and the imperative to swiftly deploy service in the AWS-4 band to meet the growing demand for mobile broadband service, the Commission should require DISH to meet build-out deadlines and milestones that are consistent with those imposed on LightSquared as part of the Commission’s approval of the transfer of control from SkyTerra to Harbinger in March 2010.⁷ Although the Commission undoubtedly recognizes that coverage requirements are essential to fostering the timely deployment of service in the AWS-4 band,⁸ the build-out schedule proposed in the NPRM is not rigorous enough in light of the pressing spectrum needs of the wireless industry and the circumstances concerning the incumbent MSS licensee and this proceeding.

Additionally, the Commission should require the AWS-4 licensee to obtain the FCC’s approval before executing any wholesale agreements that would require the AWS-4 licensee to directly or indirectly reserve more than a certain percentage (*i.e.*, 25 percent) of the total traffic

⁴ See, e.g., Comments of T-Mobile USA, Inc., IB Docket No. 05-221 (filed Feb. 16, 2006).

⁵ *National Broadband Plan*, Recommendation 5.8.4 at 87.

⁶ *NPRM* ¶ 1.

⁷ See SkyTerra Communications, Inc., Transferor, and Harbinger Capital Partners Funds, Transferee, Applications for Consent to Transfer of Control of SkyTerra Subsidiary, LLC, IB Docket No. 08-184, *Memorandum Opinion and Order and Declaratory Ruling*, 25 FCC Rcd 3059, 3085, 3088-89, 3098 ¶¶ 56, 72, App. B at Att. 2, p. 1 (2010) (“*2010 LightSquared Order*”); *NPRM* ¶ 91.

⁸ *NPRM* ¶ 93.

carried over its terrestrial network for traffic of another wireless carrier. This is similar to a condition imposed in the *2010 LightSquared Order*, but unlike the provision there, 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. Such a condition would help facilitate competition for mobile broadband services, and allow the Commission to ensure that such agreements are in the public interest.

Another approach the Commission could take to promote competition for mobile broadband services and further the public interest would be to reassign 20 MHz of the AWS-4 spectrum to other competitive providers through a competitive auction. Under this approach, DISH would be given the opportunity to return 20 MHz of its present spectrum assignment in the 2 GHz band in return for receiving full terrestrial use rights on the remaining 20 MHz. Such an approach would align with the Commission's longstanding policy of preventing windfalls from spectrum arbitrage, and avoid the marketplace distortions and perverse incentives for future behavior that typically result when a single market participant receives valuable assets without offering any concessions (or agreeing to any public interest conditions) in return. The value of the 20 MHz license with full, unrestricted terrestrial use rights that DISH would retain is worth more than its current 40 MHz license limited to MSS services with only "ancillary" terrestrial use rights. Additionally, reassignment in this manner would promote diversity in the ownership of AWS-4 spectrum, hasten the deployment of next generation mobile broadband service throughout the country, align with Commission policies and precedent, and give effect to the *National Broadband Plan's* framework for repurposing underutilized spectrum for mobile broadband use through competitive auctions.

Finally, T-Mobile urges the Commission to adopt technical rules that protect existing and future PCS operations between 1930 and 1995 MHz from harmful interference caused by AWS-4

operations, and give further consideration to other measures that may prevent mobile operations in the AWS-4 band from adversely impacting PCS services. Without such measures, the potential for harm to PCS operations will outweigh any benefits that might follow from authorizing flexible terrestrial use in the AWS-4 band.

II. THE COMMISSION SHOULD IMPOSE RIGOROUS COVERAGE AND TRAFFIC-RELATED CONDITIONS ON THE AWS-4 LICENSEE TO ENSURE THE PROMPT DELIVERY OF COMPETITIVE SERVICES IN THE AWS-4 BAND

A. The Commission Should Impose Stringent Interim and Final Build-Out Requirements on the Proposed AWS-4 Licensee.

The Commission has long imposed performance- and service-related requirements on spectrum licensees.⁹ As the Commission explained in the NPRM, such rules are intended “to promote access to spectrum and the provision of service, including to rural areas,”¹⁰ and to “ensure that the spectrum is used effectively and that service is deployed rapidly.”¹¹ Accordingly, T-Mobile supports the Commission’s decision to establish build-out requirements in the AWS-4 band,¹² and agrees that such milestones will “foster timely deployment in the AWS-4 band for the

⁹ *Id.* ¶ 90; *see, e.g.*, 47 C.F.R. §§ 1.946(a) (generally), 22.873 (commercial aviation air-ground systems), 24.103 (narrowband PCS licensees), 24.203 (broadband PCS licensees), 27.14 (AWS and WCS licensees), 54.1006 (Mobility Fund Phase I recipients), 80.49 (public coast stations), 90.551 (licensees in the 769-775 MHz and 799-804 MHz bands), 90.725 and 90.757 (Phase I licenses in the 220-222 MHz band), 101.527 (24 GHz fixed microwave licensees).

¹⁰ *NPRM* ¶ 90.

¹¹ Amendment of Parts 1, 2, 87, and 101 of the Commission’s Rules to License Fixed Services at 24 GHz, *Report and Order*, 15 FCC Rcd. 16934, 16950 ¶ 36 (2000); *see also* Amendment of the Commission’s Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz, *Report and Order and Second Notice of Proposed Rule Making*, 12 FCC Rcd 18600, 18622 ¶ 39 (1997) (explaining that the substantial service requirements is intended “to ensure that the spectrum was being used to provide service to the public”); Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, *Second Report and Order*, 22 FCC Rcd 15289, 15348 ¶ 153 (2007) (explaining that the substantial service requirements will “better promote access to spectrum and the provision of service, especially in rural areas”).

¹² *NPRM* ¶¶ 90-98.

provision of wireless, terrestrial broadband service” and “enable the Commission to take appropriate corrective action should such deployment fail to occur.”¹³

However, given the unique circumstances in this case, the specific interim and final build-out timelines proposed by the Commission are not stringent enough. The Commission’s proposed coverage requirements are not only inadequate to satisfy the robust and growing appetite for terrestrial wireless broadband service in the U.S., they disregard the dire need for prompt deployment of competitive service in the AWS-4 band.

Accordingly, T-Mobile urges the Commission to adopt more rigorous build-out requirements that mirror those imposed on LightSquared (an MSS licensee similarly situated to the proposed AWS-4 licensee) in connection with the Commission’s approval of the transfer of control of LightSquared from SkyTerra to Harbinger in March 2010.¹⁴ There, LightSquared was required to construct a terrestrial network in the U.S. that would provide coverage to at least 100 million people within 21 months after the approved transfer, at least 145 million people within 33 months after the approved transfer, and at least 260 million people within 57 months after the approved transfer.¹⁵ As the U.S. population is approximately 313 million, these figures equate to coverage rates of approximately 32 percent, 46 percent, and 83 percent of the U.S. population.¹⁶ In contrast to those reasonable and appropriate coverage obligations, the modest build-out obligations proposed by the Commission in the NPRM would require the AWS-4 licensee to provide signal coverage and offer service to only 30 percent of its service area population within 36 months, and 70 percent of its service area population within 84 months.¹⁷

¹³ *Id.* ¶ 93.

¹⁴ *2010 LightSquared Order*, 25 FCC Rcd at 3085, 3088-89, 3098 ¶¶ 56, 72, App. B at Att. 2, p. 1.

¹⁵ *Id.*

¹⁶ See <http://www.census.gov/population/www/popclockus.html>.

¹⁷ *NPRM* ¶ 92.

The differences in the coverage requirements applicable to LightSquared and those proposed for the proposed AWS-4 licensee are significant and unjustifiable. Accordingly, the Commission should impose build-out requirements on the AWS-4 licensee that more closely align with those placed on LightSquared in 2010, and require DISH to provide signal coverage and offer service as follows:

Coverage Deadline (After the License Grant)	Percentage of the Total AWS-4 Population Provided Signal Coverage and Offered Service
Within 24 months	35%
Within 36 months	50%
Within 60 months	85%

Although such an aggressive build-out schedule is neither necessary nor appropriate in most cases, it is reasonable and feasible under the present circumstances. The Commission has proposed to give a substantial amount of prime spectrum, together with flexible terrestrial use rights, to a single licensee. Moreover, the proposed licensee will not face any competition in deploying mobile service in the AWS-4 band. With the growing use of smartphones, tablets, and other wireless devices capable of receiving high speed data, demand for mobile broadband service continues to rise at an exceptional pace. Such unrelenting demand has been met with an insufficient and uneven supply of spectrum suitable for mobile broadband service. As such, the Commission cannot afford to handout 40 MHz of prime spectrum to a single licensee, and only require that licensee to offer service in 70 percent of its service areas *by 2019*.

Contrary to DISH’s recent assertions that the proposed build-out plan is too ambitious,¹⁸ seven years to deploy a terrestrial wireless network in this spectrum band is excessive in this case. T-Mobile’s own experience deploying a wireless broadband network in spectrum previously unoccupied by commercial mobile operations demonstrates the speed with which a licensee can

¹⁸ See Letter from Alison A. Minea, Corporate Counsel, DISH Networks, to Marlene H. Dortch, Secretary, Federal Communications Commission, WT Docket No. 12-70 (May 3, 2012).

deploy a wireless broadband network in such a band, when circumstances call for it. Despite the fact that its AWS-1 spectrum was heavily encumbered by federal users that were expected to remain for years when it obtained its licenses in September 2006, T-Mobile was able to clear federal users and deploy a terrestrial network covering approximately 107 million people in just over two years.¹⁹ Approximately 36 months after receiving its AWS-1 licenses, T-Mobile's national 3G network covered over 205 million people in the U.S.²⁰ Not four years after receiving its AWS-1 authorizations, T-Mobile began deploying its nationwide 4G network. The AWS-4 spectrum is not encumbered, either by federal users or any significant number of MSS users, and DISH would not face the type of delays in beginning network deployment that T-Mobile faced in its AWS-1 spectrum. In view of the foregoing, the build-out schedule proposed herein is reasonable and feasible under the circumstances, and would serve the public interest by accelerating the deployment of mobile broadband service in the AWS-4 band. Moreover, it is consistent with the coverage requirements previously imposed on an MSS licensee seeking to construct and provide service via a terrestrial wireless network.

B. The Commission Should Require the AWS-4 Licensee to Forfeit All of its AWS-4 Authority If It Fails to Meet an Interim or Final Coverage Requirement In Any of Its Service Areas.

T-Mobile largely supports the Commission's proposed penalties for the AWS-4 licensee's failure to meet the construction deadlines. Under the proposal, if the AWS-4 licensee does not meet the interim build-out requirement in any EA, all of the AWS-4 license authorizations should automatically terminate, without Commission action, and revert to the Commission for

¹⁹ Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, *Thirteenth Report*, 24 FCC Rcd 6185, 6256 ¶ 140 (2009).

²⁰ See T-Mobile USA Reports Fourth Quarter and Full Year 2009 Results (rel. Feb. 26, 2010), at <http://www.t-mobile.com/Cms/Files/Published/0000BDF20016F5DD010312E2BDE4AE9B/5657114502E70FF301270BB668BE399A/file/TMUS%20Q4%20Press%20Release%20FINAL.pdf>.

reassignment, via a competitive auction, to other licensees more capable of promptly offering service in the AWS-4 band. Such a consequence is imperative to incentivize the AWS-4 licensee to deploy service uniformly across its entire service area without delay and is appropriate given the unique circumstances of a valuable terrestrial license being awarded outside of a competitive auction process.

The consequences if the AWS-4 licensee fails to meet a final build-out deadline should also be stringent, and the Commission should revoke all of the AWS-4 authority if DISH fails to meet the final build-out deadline in any EA. Again, this approach is necessary to ensure that the AWS-4 licensee deploys service uniformly throughout its service areas, for the full duration of the license term. Without such a sanction, the AWS-4 licensee could easily construct a short-term network capable of meeting the limited interim coverage requirements, only to subsequently cherry-pick those markets that are the most financially lucrative, thereby abandoning those markets that are less valuable (and which are historically most in need of mobile broadband service). An “all or none” approach would not only prevent such market manipulation, it would preserve the value of the AWS-4 band—and the revenue that the Commission could potentially generate for such spectrum at auction—during any subsequent reassignment. Moreover, such an approach would be consistent with the Commission’s treatment of LightSquared, which stood to forfeit all of its terrestrial authority if it failed to meet any coverage requirements, whether interim or final.²¹

Although the Commission need not impose such stringent penalties in all cases, a measure requiring full revocation of AWS-4 authority upon missing an interim or final build-out requirement in any EA is appropriate in this case because the Commission proposes to grant the entire AWS-4 spectrum authorization to a single licensee. Unlike other spectrum bands, in which

²¹ See *2010 LightSquared Order*, App. B at Att. 2.

licenses are held by a range of carriers, the opportunity to deploy service in the AWS-4 band rests with one entity, which should be held to a heightened standard to ensure that the spectrum is used fully and efficiently. As a concentration of authority yields a concentration of risk, the lone licensee's failure to meet the coverage requirements in any part of the country could have deleterious effects on the development of service in the AWS-4 spectrum. Consequently, the unique circumstances presented in this proceeding justify the Commission's decision to impose rigorous penalties in the event the build-out requirements are not satisfied, and to require the AWS-4 licensee to return the entire 40 MHz of AWS-4 spectrum if it fails to meet the coverage deadline in any service area.

Revocation of AWS-4 authority upon the licensee's failure to meet an interim or final service deadline is also necessary to expedite service in the AWS-4 band, especially in light of the inordinate amount of time the 2 GHz MSS spectrum has remained unused. Although the International Bureau authorized eight operators to provide MSS in the 2 GHz band in 2001, there remains virtually no service in the band.²² In 2003, the Commission cancelled three of the eight authorizations because the licensees failed to meet the applicable service milestones.²³ Another three MSS licensees surrendered their licenses in 2005, and the two remaining licensees—DBSD and TerreStar—were acquired by DISH after declaring bankruptcy.²⁴ As the Commission noted in the NPRM, DBSD “has yet to offer either commercial satellite or terrestrial service and TerreStar has offered a small amount of satellite service . . . but not MSS/ATC service.”²⁵ By adopting a

²² *NPRM* ¶ 4.

²³ *Id.*

²⁴ *Id.* ¶¶ 7-8; New DBSD Satellite Services G.P., Debtor-in-Possession; TerreStar Licensee Inc., Debtor-in-Possession; Requests for Rule Waivers and Modified Ancillary Terrestrial Component Authority, *Order*, IB Docket No. 11-149, DA 12-332 (Mar. 2, 2012); Press Release, DISH Network, DISH Network Closes DBSD and TerreStar Acquisitions (Mar. 12, 2012), *available at* <http://finance.yahoo.com/news/dish-network-closes-dbsd-terrestar-100000737.html>.

²⁵ *Id.* ¶ 8.

strong measure that requires forfeiture of the entire AWS-4 authority upon the licensee’s failure to meet an interim or final construction requirement, the Commission can avoid the substantial harms that result from fallow or underutilized spectrum, and promote the prompt delivery of mobile broadband service in the AWS-4 band.

Moreover, if the Commission revokes the AWS-4 licensee’s authority for failing to meet an interim or final build-out milestone, the Commission should simultaneously eliminate the interference protection afforded MSS operations in the 2 GHz band.²⁶ The consistent lack of consumer demand for MSS offers an ample basis for the Commission to suspend the protection afforded to those operations if the AWS-4 spectrum is returned for reassignment. Despite the Commission’s efforts and expectations,²⁷ “there remains little commercial use of [the 2 GHz] spectrum for MSS and none for terrestrial (ATC) service.”²⁸ In light of the operational, technical, and financial challenges that have plagued the MSS industry,²⁹ the benefit of the doubt afforded to MSS operators to “overcome the substantial start-up obstacles”³⁰ of providing viable commercial mobile service is no longer appropriate. History, with its trail of defunct MSS operators,

²⁶ *Id.* ¶ 95.

²⁷ *See, e.g., National Broadband Plan*, Recommendation 5.8.4 at 88 (noting that “commercial and technological developments suggest that the potential exists for increased deployments of ATC networks and possible inclusion in consumer devices,” but concluding that “it is premature to conclude that the current ATC regime will succeed in deploying terrestrial broadband networks and attracting commercial interest”).

²⁸ *NPRM* ¶ 8.

²⁹ The inability of MSS providers to offer a competitive wireless service is not limited to the 2 GHz band. The lone MSS L-band provider that was viewed as the MSS licensee most likely to provide high-speed data service, LightSquared, is now poised to lose its ATC authority following its failure to resolve interference issues surrounding its proposed land-based operations. *See International Bureau Invites Comment on NTIA Letter Regarding LightSquared Conditional Waiver, Public Notice*, IB Docket No. 11-109, DA 12-214 (rel. Feb. 15, 2012). In light of this development, Sprint recently backed out of its network sharing and partnership agreement with LightSquared. *Sprint Ends Deal with LightSquared, Returns \$65 Million*, *Kansas City Star*, Mar. 16, 2012, available at <http://www.kansascity.com/2012/03/16/3494904/sprint-ends-deal-with-lightsquared.html>. This development further evidences the dubious value of Commission actions intended to facilitate the provision of service by MSS operators, at the expense of other mobile operators with a strong record of offering reliable terrestrial service.

³⁰ *MSS Reallocation Order*, 18 FC Rcd at 2239 ¶ 31.

demonstrates that MSS is not as viable or competitive as the Commission had once hoped. As such, if DISH forfeits its AWS-4 authority, the Commission should not require subsequent AWS-4 licensees to coordinate with or protect MSS operations in the 2 GHz band.

C. The Commission Should Require the AWS-4 Licensee to File Biannual Progress Reports.

T-Mobile also supports the Commission's proposal to require the AWS-4 licensee to demonstrate its compliance with the performance requirements by filing periodic construction notifications with the Commission. However, in addition to submitting a notice within 15 days of a milestone certifying that it has met the applicable performance benchmark,³¹ the AWS-4 licensee should be required to file a progress report every six months during the term of the AWS-4 license, each detailing its progress in constructing the terrestrial network throughout its service areas. Such a requirement would provide the Commission with a reasonable understanding and expectation regarding deployment of service in the AWS-4 band, and would parallel the reporting requirements imposed on LightSquared in 2010.³²

D. The Commission Should Require the AWS-4 Licensee to Obtain FCC Approval Before Entering Into Any Wholesale Agreement With Another Carrier For More Than a Certain Percentage of Its AWS-4 Terrestrial Network Capacity.

In addition to imposing stringent coverage requirements, the Commission should require the AWS-4 licensee to obtain the Commission's prior approval before entering into any wholesale agreement that would result in another wireless carrier's traffic accounting for more than a certain substantial percentage (*i.e.*, 25 percent) of the total traffic carried on the AWS-4 licensee's terrestrial network. By imposing such a condition, and affording the Commission an opportunity to review the competitive implications of certain wholesale arrangements, the Commission could

³¹ *NPRM* ¶ 97.

³² *See 2010 LightSquared Order*, App. B at Att. 2.

preserve the pro-competitive effects intended by authorizing flexible terrestrial use in the 2 GHz MSS band.

The Commission's rules already reflect how parties can acquire substantial spectrum resources through wholesale relationships. For example, Section 1.2112 of the Commission's rules requires each applicant claiming designated entity status in a competitive auction to list and summarize any wholesale agreements into which the applicant has entered to resell spectrum capacity of the subject license.³³ Moreover, the Commission has recognized the need for regulatory approval over certain secondary market transactions to protect the public interest. Under Section 252(e) of the Communications Act, for example, incumbent local exchange carriers are required to obtain state commission approval for interconnection agreements negotiated with competitive local exchange carriers.³⁴ The Commission concluded that the opportunity for regulatory approval over interconnection agreements is necessary "to ensure that such agreements do not discriminate against third parties, and are not contrary to the public interest."³⁵ Similarly, LightSquared is required to obtain Commission approval before entering into any agreement that would directly or indirectly require LightSquared to (i) make its L-band spectrum available to any entity that is the largest or second largest wireless provider, or (ii) carry traffic from any combination of the first and second largest U.S. wireless carriers, which comprises more than 25% of the total traffic on LightSquared's terrestrial network.³⁶ Unlike the condition imposed on LightSquared, however, the condition adopted in this case would not be limited to the two largest

³³ 47 C.F.R. § 1.2112(b)(2)(vii).

³⁴ 47 U.S.C. § 252(e).

³⁵ Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, *First Report and Order*, 11 FCC Rcd 15499, 15583 ¶ 167 (1996).

³⁶ See *2010 LightSquared Order*, App. B at Att. 2 (Conditions #1 and #3).

wireless carriers, but would apply to any wholesale arrangements for an amount of AWS-4 network capacity above the specified threshold.

The Commission already has the authority to review sales and leases of the AWS-4 spectrum by DISH to other entities and would approve such transactions assuming it found they advanced competition and were otherwise in the public interest. The proposed condition would simply allow the Commission to ensure that significant wholesale agreements for access to this spectrum would similarly be pro-competitive and consistent with the public interest. As spectrum is the most essential resource for offering competitive wireless broadband service,³⁷ the Commission's decision to allow flexible terrestrial use in the AWS-4 band (and thereby increase the supply of spectrum for terrestrial mobile broadband service) could facilitate substantial competition in the mobile broadband service marketplace. However, without directly monitoring the competitive impact of certain wholesale agreements, the potentially pro-competitive effects of the AWS-4 designation could be jeopardized. Accordingly, the Commission should impose this condition to ensure that the AWS-4 band continues to serve the public interest.

III. ANOTHER APPROACH BY WHICH THE COMMISSION CAN SERVE THE PUBLIC INTEREST IS BY REASSIGNING AT LEAST 20 MHZ OF THE AWS-4 SPECTRUM THROUGH A COMPETITIVE AUCTION

As an alternative to the coverage- and traffic-related conditions described above, the Commission can also serve the public interest by reassigning 20 MHz of the proposed AWS-4 spectrum via a competitive auction. Under this approach, the Commission could afford DISH the opportunity to surrender 20 MHz of its current 2 GHz MSS allocation in return for receiving flexible terrestrial use rights in the remaining 20 MHz. The Commission could thereafter license the 20 MHz of returned 2 GHz spectrum as AWS-4 spectrum through a competitive auction.

³⁷ Petition to Deny of T-Mobile, USA, Inc., *Application of Cellco Partnership d/b/a Verizon Wireless and SpectrumCo LLC for Consent to Assign Licenses; Application of Cellco Partnership d/b/a Verizon Wireless and Cox TMI Wireless, LLC for Consent to Assign Licenses*, WT Docket No. 12-4, 10 (filed Feb. 21, 2012).

Under this approach, DISH would receive full, flexible terrestrial use rights if, but only if it chose to voluntarily return 20 MHz of the 2 GHz MSS spectrum for reassignment through a competitive auction.

Such reassignment, through a market-based mechanism, is another reasonable and viable means of ensuring the rapid deployment of mobile broadband service in the AWS-4 band. This approach would also align with Commission precedent and policy and ensure that at least half of the AWS-4 spectrum is acquired and used by the service provider that values it the most.³⁸ Moreover, reassignment of only part of the AWS-4 band would preserve the ability of the incumbent MSS licensee to offer terrestrial mobile broadband service.³⁹

A. Reassignment Through a Competitive Auction Would Avoid a Windfall to the AWS-4 Licensee.

Reassigning 20 MHz of the AWS-4 spectrum through a competitive auction would serve the public interest by preventing a single licensee from receiving a substantial windfall at the expense of other licensees that have invested billions of dollars in deploying and expanding competitive wireless broadband networks. The Commission has long maintained a policy against granting windfalls to a single party to avoid marketplace distortions and unjust competitive advantages. The Commission's decision to reconfigure the 800 MHz band in 2004 reflects the lengths to which the Commission will go to avoid an unfair windfall to a single licensee. To

³⁸ As Chairman Genachowski has noted, "market forces" should be used "to reallocate spectrum to its highest and best use." FCC Chairman Julius Genachowski Remarks as Prepared for Delivery, GSMA Mobile World Congress Barcelona (Feb. 27, 2012), *available at* http://transition.fcc.gov/Daily_Releases/Daily_Business/2012/db0227/DOC-312667A1.pdf.

³⁹ If the Commission reassigns 20 MHz of the AWS-4 spectrum through a competitive auction, however, it should not require the winning bidders to satisfy build-out requirements that are as stringent as those proposed in Section II.A. Unlike the incumbent 2 GHz MSS licensee, which will receive the AWS-4 spectrum at no cost and will face no competition in deploying terrestrial mobile service in the AWS-4 band, a licensee that acquires AWS-4 spectrum through a competitive auction will have paid a substantial amount of money for the flexible use rights, and will have a strong incentive to deploy services in the AWS-4 band as quickly as possible. Accordingly, the unique circumstances justifying more rigorous coverage requirements would not exist with respect to such licensee, and such licensee should be subject to build-out deadlines that are more consistent with those imposed on licensees that acquired spectrum in prior auctions.

compensate Nextel for the relocation costs and spectrum rights it had to surrender in connection with the 800 MHz band reconfiguration, the Commission granted Nextel the right to operate on 10 MHz of 1.9 GHz band. In doing so, however, the Commission made clear that the new 1.9 GHz spectrum rights were granted on a “value for value” basis to ensure that Nextel “does not realize any windfall gain.”⁴⁰ Even though it recognized Nextel’s “critical role” in the 800 MHz band reconfiguration, the Commission nevertheless directed Nextel to make a net payment to the U.S. Treasury if the value of the compensatory 1.9 GHz spectrum rights exceeded the costs incurred by Nextel in connection with the new 800 MHz band plan.⁴¹

The recently enacted Middle Class Tax Relief Act and Job Creation Act of 2012 (the “Spectrum Act”)⁴² further demonstrates the Commission’s prevailing policy of avoiding windfalls. Although Congress could have simply authorized the Commission to grant expanded flexible use rights to the incumbent TV broadcast licensees, thereby obviating any need to auction those new rights to third parties, the Spectrum Act directs the Commission to conduct two-sided “incentive” auctions for broadcast TV spectrum “to determine the amount of compensation that each broadcast television licensee would accept in return for voluntarily relinquishing some or all of its broadcast television spectrum usage rights.”⁴³ It further directs the Commission to assign the relinquished

⁴⁰ Improving Public Safety Communications in the 800 MHz Band, *Report and Order, Fifth Report and Order, Fourth Memorandum Opinion and Order, and Order*, 19 FCC Rcd 14969, 14975 ¶¶ 5, 31-35 (2004).

⁴¹ *Id.* The Commission’s rules governing unjust enrichment by designated entities that received bidding credits in FCC spectrum auctions were also adopted in part “to prevent sellers from obtaining any windfall profit from premature transfer of a license.” Implementation of Section 309(j) of the Communications Act – Competitive Bidding, *Second Report and Order*, 9 FCC Rcd 2348, 2385 ¶¶ 211, 214 (1994). The Commission found that such measures, designed to avoid post-auction license transfers by bidding credit recipients that acquired spectrum “for less than true market value at auction,” were necessary in the public interest. *Id.* ¶ 212. Thus, the entire regulatory regime aimed at preventing unjust enrichment rests on the Commission’s sound policy aversion to windfalls.

⁴² See Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96 § 6401 et seq., 126 Stat. 158 (the “Spectrum Act”).

⁴³ *Id.* § 6403(a)(1).

spectrum “through a system of competitive bidding.”⁴⁴ Thus, the Spectrum Act’s incentive auction mechanism was adopted not only to ensure that the most qualified entities have an adequate opportunity to obtain the spectrum in a fair and efficient marketplace, but also to prevent the incumbent broadcast licensees from acquiring a windfall of flexible use rights.⁴⁵

The Commission’s preference to grant the entire proposed AWS-4 allocation to the incumbent MSS licensee, without requiring the licensee to satisfy meaningful public interest conditions in return, would totally dispense with the longstanding policy against windfalls. Moreover, it would effectively result in the Commission picking winners and losers by hamstringing other operators that would otherwise be able to provide competitive services in the AWS-4 bands.

B. Reassignment Through a Competitive Auction Would Promote Competition and Diversity of Spectrum Holders.

Reassignment of part of the AWS-4 spectrum would also promote competition and diversity among the holders of quality wireless spectrum, which is especially important in a U.S. spectrum environment increasingly characterized by the consolidation of spectrum assets, particularly in mobile spectrum below 3.5 GHz. The Commission has been especially concerned with promoting competition in the spectrum band now at issue. When it reduced the amount of spectrum allocated to MSS from 70 to 40 MHz in 2000, the Commission emphasized its ongoing

⁴⁴ *Id.*

⁴⁵ Antipathy for windfalls also finds application in policies governing non-spectrum-related matters. In the Universal Service context, for example, the Telecommunications Act of 1996 “sets standards to prevent waste, windfalls, and excessive expense for contributing carriers and their customers.” Federal-State Joint Board on Universal Service, *Further Notice of Proposed Rulemaking*, 16 FCC Rcd 6141, 6171 (2001). Guided by this principle, the Commission has sought comment on “actions that may be necessary to prevent ... windfalls to carriers” receiving Universal Service Fund payments. Federal-State Joint Board on Universal Service – Access Charge Reform, *Seventh Report and Order and Thirteenth Order on Reconsideration in CC Docket No. 96-45, Fourth Report and Order in CC Docket No. 96-262 and Further Notice of Proposed Rulemaking*, 14 FCC Rcd 8078, 8084 ¶ 13 (1999).

obligation to “ensure that the 2 GHz MSS band *is not monopolized.*”⁴⁶ By preventing such monopolization, the Commission explained that it could ensure that the MSS spectrum is used “efficiently and effectively” by a diverse group of licensees.⁴⁷ However, the proposal to grant an exclusive license to one service provider would result in the very monopolization of the proposed AWS-4 band that the Commission has previously sought to avoid. Such a result, absent rigorous build-out and wholesale service safeguards, would frustrate the natural evolution of the market for mobile broadband service by preventing other wireless operators from acquiring the spectrum resources necessary to address their network capacity and coverage needs. This, in turn, could stunt the development and deployment of competitive mobile broadband services, to the detriment of U.S. consumers.

C. Reassignment Through a Competitive Auction Would Allow the Commission to Raise a Substantial Amount of Revenue for the U.S. Treasury.

Reassigning half of the AWS-4 spectrum would also allow the Commission to raise a significant amount of revenue for the U.S. Treasury, which could be used to reduce the U.S. budget deficit. The Commission well knows the financial value of competitive auctions to the federal government. As Chairman Genachowski recently explained to Congress:

Spectrum auctions have raised more than \$50 billion for the U.S. Treasury in the past two decades, and economists regard the economic value created by FCC auctions as being about 10 times that number, or \$500 billion in value. The FCC has conducted 80 auctions, granting more than 30,000 licenses. A few months ago, a group of 112 leading economists from across the ideological spectrum wrote, “The original simultaneous, multiple-round auction system implemented in

⁴⁶ Amendment of Part 2 of the Commission’s Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, Including Third Generation Wireless Systems, *Third Report and Order, Third Notice of Proposed Rulemaking and Second Memorandum Opinion and Order*, 18 FCC Rcd 2223, 2238 ¶ 29 (2003) (“*MSS Reallocation Order*”).

⁴⁷ *Id.*

1994 was novel, but the FCC was able to implement the path-breaking auctions that were the basis for successful auctions around the world.”⁴⁸

In addition to traditional spectrum auctions, incentive auctions offer “an opportunity to unleash vitally needed additional spectrum for mobile broadband and create tremendous value for American consumers, while raising billions of dollars for deficit reduction.”⁴⁹

The economic value of the AWS-4 spectrum, even if only 20 MHz, is not illusory or hypothetical. Based on past auctions for mobile broadband spectrum, and given the propagation and other characteristics of the AWS-4 spectrum,⁵⁰ the Commission could reasonably expect a competitive auction to fetch a substantial amount of money, measuring in the billions of dollars. This, in turn, would provide the U.S. Treasury with a promising opportunity to reduce the U.S. budget deficit.⁵¹

D. Reassignment Through a Competitive Auction Would Further the National Broadband Plan’s Goal of Repurposing Underutilized Spectrum for Mobile Broadband Use and Satisfy Part of the Commission’s Obligations Under the Spectrum Act.

Reassigning 20 MHz of the AWS-4 spectrum would further the *National Broadband Plan’s* framework for meeting the nation’s future broadband spectrum needs. First, the *Plan* recommends that the Commission allocate additional spectrum within the next ten years, including

⁴⁸ Statement of Chairman Julius Genachowski, Federal Communications Commission, Hearing on the FCC’s Fiscal 2013 Budget Request Before the Subcommittee on Financial Services and General Government, Committee on Appropriations, U.S. House of Representatives (Mar. 19, 2012), *available at* http://transition.fcc.gov/Daily_Releases/Daily_Business/2012/db0319/DOC-313081A1.pdf.

⁴⁹ *Id.*

⁵⁰ See Coleman Bazelon, *The Economic Basis of Spectrum Value: Pairing AWS-3 with the 1755 MHz Band is More Valuable than Pairing it with Frequencies from the 1690 MHz Band*, The Brattle Group, Inc. at 6-8 (2011), attached to Letter from Coleman Bazelon, Principal, The Brattle Group, Inc., to Marlene Dortch, Secretary, Federal Communications Commission (Apr. 11, 2011) in ET Docket No. 10-123, WT Docket No. 07-195, GN Docket No. 09-51 (explaining that the value of spectrum depends on the physical characteristics of the spectrum, the existence of band compatible technology, and encumbrances to use of the spectrum).

⁵¹ *Cf.* Remarks of Commissioner Robert M. McDowell, The Global Forum, Palais D’Egmont – Brussels (Nov. 7, 2011) (“Given today’s unprecedented budget deficits, I question whether the U.S. can afford *not* to auction any and all spectrum recovered in th[e] 700 MHz band.”).

300 MHz of spectrum between 225 MHz and 3.7 GHz by 2015, for mobile broadband use.⁵² Second, the *Plan* recommends that the Commission reallocate and repurpose underutilized spectrum principally through competitive auctions.⁵³ Together, these recommendations provide a clear prescription for how the Commission can most effectively meet the burgeoning U.S. demand for future mobile broadband services.⁵⁴ Additionally, repurposing 20 MHz of contiguous spectrum in the AWS-4 band would satisfy the Commission’s obligation, arising under Section 6401(b) of the Spectrum Act, to allocate at least 15 MHz of contiguous spectrum for commercial use by 2015 through a “system of competitive bidding.”⁵⁵

E. Reassignment Through a Competitive Auction Would Preserve the Incumbent 2GHz MSS Operator’s Ability to Offer Terrestrial Service.

In addition to making additional flexible use spectrum available to satisfy the spectrum needs of existing mobile broadband providers, reassignment of only a portion of the AWS-4 band would allow DISH to proceed with plans to implement terrestrial mobile broadband service, if that service ultimately comes to fruition.⁵⁶ The Commission relied on a similar finding in 2000 when it concluded that “reallocation of some 2 GHz MSS spectrum should not impair the growth of MSS,” and that “[t]he remaining MSS allocations, both in the 2 GHz band and other bands, will be sufficient to support growth of this service for the foreseeable future.”⁵⁷ Moreover, voluntary reassignment would enhance the value of DISH’s spectrum, as the remaining 20 MHz license with unrestricted terrestrial use rights that DISH would retain would be worth more than its current 40 MHz MSS allocation with “ancillary” terrestrial use rights.

⁵² *National Broadband Plan*, Recommendation 5.8 at 84.

⁵³ *Id.*, Recommendation 5.4 at 81.

⁵⁴ *Id.* § 5.3 at 81 (noting that “[i]n many cases, the traditional auction model is likely to remain the preferred approach”).

⁵⁵ Spectrum Act § 6401(b).

⁵⁶ *See MSS Reallocation Order*, 18 FCC Rcd at 2238 ¶ 29.

⁵⁷ *Id.* at 2239 ¶ 31.

IV. THE COMMISSION SHOULD GIVE CAREFUL CONSIDERATION TO THE POTENTIAL HARMFUL INTERFERENCE THAT OPERATIONS IN THE AWS-4 BAND MAY CAUSE TO NEARBY PCS OPERATIONS.

T-Mobile applauds the Commission for proposing technical rules that are designed to protect current and future PCS services operating in the 1930-1995 MHz band from harmful interference caused by AWS-4 mobile devices, and for seeking further comment on how to prevent interference to the PCS downlink band.⁵⁸ As the NPRM notes, because the proposed uplink portion of the AWS-4 band is only 5 MHz away from the PCS downlink band at 1930-1995 MHz, the potential for AWS-4 devices and equipment to cause harmful interference to PCS operations is substantial.⁵⁹ Accordingly, the Commission should adopt technical rules that adequately protect wireless operations in the PCS band, and continue to give due consideration to any additional information it receives concerning how flexible use in the AWS-4 band may adversely impact PCS services between 1930-1995 MHz.

Numerous parties have already urged the Commission to take measures to prevent harmful interference caused by 2 GHz MSS operations.⁶⁰ Taking affirmative measures to protect PCS operations from such interference would also be consistent with the Spectrum Act. Although that legislation directs the Commission to allocate the AWS-2 H Block (located at 1995-2000 MHz, immediately adjacent to the proposed AWS-4 uplink spectrum) to commercial use via a competitive auction,⁶¹ it further provides that such reallocation is prohibited if commercial use in the AWS-2 H Block is not possible without causing harmful interference to licensees in the PCS

⁵⁸ NPRM ¶ 29.

⁵⁹ *Id.* ¶ 35.

⁶⁰ *See, e.g.*, Comments of Ericsson, ET Docket No. 10-142, WT Docket Nos. 04-356, 07-195, at 9 (July 8, 2011); Reply Comments of Sprint Nextel Corporation, ET Docket No. 10-142, WT Docket Nos. 04-356, 07-195, at 6 (July 22, 2011).

⁶¹ Spectrum Act § 6401(b).

