

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

In the Matter of	)	
	)	
AMENDMENT OF THE COMMISSION'S	)	GN DOCKET No. 13-185
RULES WITH REGARD TO	)	
COMMERCIAL OPERATIONS IN THE	)	
1695-1710 MHz , 1755-1780 MHz, AND	)	
2155-2180 MHz BANDS	)	
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**COMMENTS OF AT&T INC.**

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## **Comments of AT&T Inc.**

AT&T Inc. respectfully submits these comments on behalf of itself and its operating company affiliates (collectively, “AT&T”) in response to the Commission’s Public Notice seeking comment on proposed rules for commercial mobile wireless operations in the 1695-1710 MHz, 1755-1780 MHz, 2020-2025 MHz and 2155-2180 MHz Bands.<sup>1</sup>

### **I. Introduction and Summary**

AT&T supports the FCC’s efforts to make additional spectrum available for commercial, licensed mobile broadband services. AT&T and its competitors continue to invest tens of billions of dollars per year into upgrades in technology, coverage expansions and new facilities like small cells, to expand the capabilities and capacity of mobile broadband networks. Without additional spectrum resources, however, the industry is unlikely to be able to continue to stay ahead of burgeoning consumer demand. The allocation and assignment of the AWS-3 spectrum presents a rare opportunity. With the adoption of a forward-looking band plan and harmonized service rules, the allocation and assignment of this spectrum can be a major step toward alleviating this spectrum shortage.

NTIA and many federal users of spectrum, including the Department of Defense, have made considerable efforts, working with industry through the CSMAC process and separately, to analyze the potential for clearing and/or sharing spectrum in the 1675-1710 MHz and 1755-1850 MHz bands. While a great deal of progress has been made, this work is still in progress. Still, AT&T believes that the Commission has enough information at this point to proceed with

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<sup>1</sup> In the Matter of Amendment of the Commission’s Rules with Regard to Commercial Operations in the 1695-1710 MHz, 1755-1780 MHz, and 2155-2180 MHz Bands, *Notice of Proposed Rulemaking and Order on Reconsideration*, GN Dkt. No. 13-185 (July 23, 2013)(“AWS-3 NPRM”).

service rules for AWS-3. Indeed, the Commission should not delay if it is to meet Congress' mandate to assign the AWS-3 spectrum by competitive bidding by February 22, 2015.

In this proceeding, the Commission has before it a rare opportunity--to take the bits and pieces of spectrum Congress has required it to assign, and combine them in a band plan that would not only help to address the spectrum crunch, but do so in a way that speeds the deployment of service in this spectrum, promotes competition, and maximizes the utility and value of this spectrum to the public. By pairing the 1755-1780 MHz with 2155-2180 MHz, and pairing the 1695-1710 MHz with 15 MHz of contiguous commercial spectrum, the Commission could add 80 MHz of paired AWS-3 spectrum that would be contiguous to and harmonized with the 90 MHz of AWS-1 spectrum used today to support LTE, to create a contiguous, integrated band of prime, paired spectrum. The Commission should not fail to seize this opportunity.

Of course, while much progress has been made in analyzing the challenges involved with reallocating this government spectrum for commercial mobile broadband, there is a long path ahead. Congress' clear directive is that federal spectrum reallocated for commercial mobile use should be cleared of incumbent federal uses, if it is at all possible to do so. The NTIA's directive to the CSMAC working groups examining transition of the 1695-1710 MHz and 1755-1780 MHz blocks, however, was for the most part to examine whether and how commercial users could share these blocks with incumbent federal users. While work should continue with regard to how this spectrum might be shared with government systems, both those that are transitioning out of the band and those operations that will remain, no one involved should lose sight of, or fail to strive for, achieving Congress' goal of clearing federal systems out of the spectrum to be assigned here.

Moreover, the ongoing planning for the transition of these bands needs to happen more quickly. Congress has directed that the AWS-3 spectrum be assigned by February of 2015, which would require that an auction begin much sooner, in 2014. Prospective bidders will need to have some clarity and certainty with regard to when federal users will be relocated to other spectrum or operations truncated above 1780 MHz, and the terms under which they would share the spectrum with any federal users that cannot be quickly relocated. But Congress' objective—to clear the spectrum—should not be lost in the process.

In this proceeding, the Commission has the chance not only to make additional spectrum available, but to do so in a way that would maximize its utility, increase its value and promote competition. AT&T generally supports the technical service rules the FCC proposes here. It encourages the Commission to also adopt the optimal band plan—one that would effectively expand the AWS band by 80 MHz. This is a rare opportunity. The FCC should not fail to grasp it.

## **II. The FCC Should Allocate the AWS-3 Spectrum In Paired Allocations Adjacent to the Existing AWS-1 Band, to Create a Larger, Contiguous AWS Allocation.**

In the Middle Class Tax Relief and Job Creation Act of 2012 (the “Spectrum Act”),<sup>2</sup> Congress included several provisions designed to make more spectrum available for commercial use.<sup>3</sup> In addition to provisions authorizing the use of incentive auctions to reallocate broadcast television spectrum for mobile wireless use,<sup>4</sup> the Spectrum Act requires the allocation and assignment by competitive bidding of spectrum in the following bands for commercial mobile use:

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<sup>2</sup>Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, 126 Stat. 156 (2012) (the “Spectrum Act”).

<sup>3</sup> *Id.* at §§ 6001-6703.

<sup>4</sup> *Id.* at § 6402.

- 25 megahertz at 2155-2180 MHz;
- an additional contiguous 15 megahertz to be identified by the Commission;
- 15 megahertz between 1675-1710 MHz, to be identified by NTIA by February 22, 2013;
- up to 10 megahertz at 1915-1920 MHz and 1995-2000 MHz (the “H Block”), if the Commission finds no harmful interference into the neighboring Personal Communications Service (“PCS”) band.<sup>5</sup>

The Commission is required to grant new initial licenses for all of these bands by February 2015.<sup>6</sup>

The Commission now proposes to adopt service rules for the 2155-2180 MHz block and the 15 MHz identified by NTIA at 1695-1710 MHz in accordance with the Spectrum Act.<sup>7</sup> In addition, the Commission proposes to establish service rules for a 5 MHz slice of commercial spectrum at 2020-2025 MHz, and for the 1755-1780 MHz block, which currently is allocated for federal use, but which the NTIA (and the Department of Defense) proposes for reallocation to commercial use (on a shared basis) within 5 years.<sup>8</sup>

Standing alone, the shards of spectrum involved here that are specifically referenced in the Spectrum Act — 5 MHz of spectrum at 2020-2025 MHz, adjacent to the S Band uplink, 15

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<sup>5</sup> *Id.* § 6401.

<sup>6</sup> *Id.* § 6401(b). In order to comply with this mandate, the Commission already has adopted auction and service rules for the H Block (1915-1920 and 1995-2000 MHz) in a separate proceeding. *See* Auction of H Block Licenses in the 1915-1920 MHz and 1995-2000 MHz Bands Scheduled for January 14, 2014, *et al.*, *Notice and Filing Requirements, Reserve Price, Minimum Opening Bids, Upfront Payments, and Other Procedures for Auction 96*, AU Docket No. 13-178, DA 13-1885 (WTB rel. Sept. 13, 2013); Service Rules for Advanced Wireless Services H Block- Implementing Section 6401 of the Middle Class Tax Relief and Job Creation Act of 2012 Related to the 1915-1920 MHz and 1995-2000 MHz Bands, *Report and Order*, 28 FCC Rcd 9483 (2013).

<sup>7</sup> *AWS-3 NPRM* at ¶¶ 30-31, 53-72, 83-112, 170, 173.

<sup>8</sup> *AWS-3 NPRM* at ¶¶ 32-35, 73-79, 83-112, 172.

MHz of spectrum at 1695-1710 currently used by satellite earth stations and adjacent to AWS-1 uplink (and federal uses), and 25 MHz at 2155-2180 MHz, adjacent to the AWS-1 downlink, but unpaired -- would be likely to contribute much less to easing the spectrum crunch than the sum total of 45 MHz might suggest. As a result of persistent, persuasive Commission advocacy, however, NTIA now has indicated that 1755-1780 MHz can be made available for commercial use. Moreover, Congress has directed the FCC to identify an additional 15 MHz to be added to the AWS-3 allocation, and assigned at the same time. This presents the opportunity for the Commission to combine the 45 MHz of unpaired shards of spectrum in a way that would ensure that they are put to their best and highest use and are not wasted. Indeed, the Commission could adopt a band plan that would effectively add 80 MHz of prime, paired, contiguous spectrum to the AWS allocation, which would be a huge step toward easing the spectrum crunch.

AT&T proposes to pair the 1755-1780 MHz block with the 2155-2180 MHz block as uplink and downlink, respectively.<sup>9</sup> AT&T supports pairing the 1695-1710 MHz block as uplink with 15 MHz of contiguous, commercial downlink spectrum, which would meet Congress' mandate that the Commission identify and allocate an additional 15 MHz for allocation to commercial mobile use.<sup>10</sup> CTIA has proposed that the 1695-1710 MHz block be paired with 15 MHz of downlink at 2095-2110 MHz, which is an ideal pairing, but there might be other options as well. As explained below, this band plan would allow for the creation of a single band of 170 MHz of AWS spectrum.

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<sup>9</sup> *AWS-3 NPRM* at ¶ 33.

<sup>10</sup> *AWS-3 NPRM* at ¶¶ 20-21, 39 (citing to and discussing March 13, 2013 proposal of CTIA The Wireless Association ("CTIA") urging the Commission to (i) designate 2095-2110 MHz as the fifteen megahertz of contiguous spectrum required to be identified by the Commission under the Spectrum Act, and (ii) pairing that spectrum with 1695-1710 MHz).

The ability to combine the AWS-3 and AWS-1 bands in a single band class would result in more efficient spectrum utilization and more efficient LTE networks. LTE is at its most efficient when used in large contiguous channels, generally requiring minimum channel sizes of 10x10 MHz or more to justify investing in an additional band class.<sup>11</sup> Indeed, T-Mobile and Verizon each already have sufficient AWS spectrum to deploy LTE in contiguous 20x20 MHz channels in many areas.<sup>12</sup> Sprint controls more total spectrum and more contiguous spectrum for LTE deployment than any other carrier—with an average spectrum depth of more than 130 MHz of 2.5 GHz spectrum nationwide, in addition to more than 50 MHz of PCS and SMR spectrum.<sup>13</sup>

The adoption of a band plan pairing 1755-1780 MHz with 2155-2180 MHz, and 1695-1710 MHz with an additional 15 MHz of contiguous spectrum, would facilitate the aggregation of contiguous spectrum for highly efficient, wide channel deployment of LTE. The implementation of equipment using the new, consolidated AWS band class would allow for the aggregation of AWS-3 blocks with AWS-1 blocks. This would permit new entrants and existing providers to utilize the auction and, if necessary, secondary markets to aggregate contiguous channels of 10 x 10 MHz or more, promoting competition as well as the efficient use of spectrum resources and adding much needed capacity.

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<sup>11</sup> Prepared Testimony of Kathleen O'Brien Ham, Vice President, Federal Regulatory Affairs, T-Mobile US, Inc. Before the Subcommittee on Communications and Technology, House Committee on Energy and Commerce, July 23, 2013 at 7; Letter of Tamara Priess, Vice President, Federal Regulatory Affairs, Verizon, to Marlene H. Dortch, Secretary, Federal Communications Commission of July 17, 2013, filed in WT Docket No. 12-269.

<sup>12</sup> See, In the Matter of Applications of Cellco Partnership d/b/a Verizon Wireless and SpectrumCo LLC and Cox TMI, LLC for Consent to Assign AWS-1 Licenses, WT Docket No. 12-4 at ¶ 74 (August 23, 2012); In the Matter of Applications of Deutsche Telekom AG, T-Mobile USA, Inc., and MetroPCS Communications, Inc. for Consent to Transfer Control of Licenses and Authorizations, WT Docket No. 12-301 at ¶ 40 (March 12, 2013).

<sup>13</sup> In the Matter of Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services, WT Docket No. 11-186 at ¶131 (March 21, 2013) (“Sixteenth Report”).

Adding 80 MHz of spectrum that could be readily aggregated with existing AWS-1 spectrum also would boost participation in the auction and increase the value of the spectrum. Acquiring spectrum in a new band, whether for an existing carrier or a potential entrant, involves a certain amount of sunk investment, to deploy appropriate antennas and other network equipment, and to add a band to devices. To justify the investment in a new band, competitors typically examine whether there is an opportunity to acquire a large enough geographic footprint to earn a return on the investment, and whether there is sufficient contiguous spectrum available in the band to allow for future capacity growth. For this reason, many bidders—and prospective market entrants, in particular—may be unlikely to bid in an auction for spectrum in a new band class where the total amount of available spectrum is limited to a single 5X5 MHz allocation, for example. Such a bidder would be all the less likely to bid on separate shards of unpaired spectrum that each might require its own standard as part of a carrier aggregation combination. By contrast, the auction of a nationwide allocation of 80 MHz of paired spectrum is far more likely to attract broad participation from existing carriers and new entrants alike.

In addition, such a band plan would speed deployment and reduce deployment costs. The new, combined AWS-1/AWS-3 band would be internationally harmonized. Moreover, AWS-1 is one of the most widely used LTE bands in the United States today. A combined AWS-1/AWS-3 band would be the largest spectrum band—spanning 170 MHz of paired spectrum, larger than the proposed 600 MHz allocation, and as large as Band 2 (PCS) and Band 5 (Cellular) combined. These factors make it highly likely that a new, internationally harmonized AWS-1/AWS-3 band class would result in significant economies of scale and allow for more immediate equipment development and deployment.

### **III. The Department of Defense Proposal for the 1755-1780 MHz Band is Very Constructive, But Further Refinements and Analyses Are Required.**

AT&T welcomes the Department of Defense (DoD)'s constructive proposals designed to make 1755-1780 MHz available for auctioning and licensing in the near term. In a July 17 letter to NTIA, DoD offered to (i) "truncate" some of its operations in the 1755-1850 MHz band, limiting them to only the 1780-1850 MHz portion and (ii) relocate other operations out of the 1755-1850 MHz band entirely. DoD has asked that it be allowed to remain in the 1780-1850 MHz band, and to relocate some operations to the BAS spectrum, from 2025-2110 MHz, on a shared basis (which the DoD notes would obviate the need to relocate broadcasters). DoD would not be provided access to the 5 GHz MHz band, leaving this spectrum available for a Wi-Fi allocation. All in all, DoD systems in 7 categories would be relocated out of 1755-1780 MHz, entirely, while 4 categories of systems would remain in the 1755-1780 MHz block on a shared basis after the reallocation to commercial mobile use: Satellite Operations (SA TOPS), Electronic Warfare (EW), Air Combat Training Systems (ACTS), where required, and limited Joint Tactical Radio System (JTRS). The remaining DoD operations would be compressed into 1780-1850 MHz. DoD estimates that the price tag for those DoD services being relocated or truncated would be \$3.5 Billion.<sup>14</sup>

While DoD's proposals represent real progress, additional refinements and analysis are likely required. For example, the DoD's proposal to remain in 1780-1850 MHz, and the potential for future commercial access to that spectrum should be considered carefully. Second, bands in addition to the BAS band should be explored as potential relocation bands. In any event, relocation of government systems to 2095-2110 MHz should not be considered at all,

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<sup>14</sup> See *NTIA July 2013 Letter* at 1. Letter from Teresa M. Takai, Chief Information Officer, DoD, to Lawrence E. Strickling, Assistant Secretary for Communications and Information, NTIA, U.S. Dept. of Commerce (July 17 2013). NTIA notes that it has not forwarded two attachments to the DoD letter that have not yet been approved for public release, but that these attachments will be submitted when such approval is received. *Id* at n.1.

given the ideal suitability of this spectrum for commercial mobile use (if paired with 1695-1710 MHz as CTIA proposes). The relocation and compression is proposed to take place over 5 years—can it be completed more quickly to speed the availability of this spectrum? Lastly, more information is needed about the DoD systems to evaluate relocation over time and whether they can reasonably share commercial mobile spectrum.

Moreover, this proposal, like the recommendations that come out of the CSMAC working groups, should be considered together with the Congressional directive that NTIA should clear spectrum for commercial use—sharing should only be considered in cases where clearing is not feasible due to technical or cost constraints.<sup>15</sup> As the Commission noted in the *AWSP-3 NPRM*, NTIA did not evaluate the possibility of exclusive non-Federal use of the 1755-1780 MHz band.<sup>16</sup> It is time to do so. Further study is needed to determine whether any of the systems DoD proposes to remain in the 1755-1780 MHz block should be relocated or truncated instead. Furthermore, to the extent that it would be technically infeasible to move these systems out of 1755-1780 MHz,<sup>17</sup> more needs to be done to show how sharing would work. In this regard, additional analysis is needed on the definition and measurement of interference. Better modeling and testing is needed to more accurately represent the real-world interference environment that would exist between Federal and commercial users, including consideration of such effects as clutter, reasonable interference protection limits, and a truly representative LTE system model. Only recently has a process been initiated to allow the release of more Federal system technical

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<sup>15</sup> 47 U.S.C. § 923(j).

<sup>16</sup> *AWSP-3 NPRM* at ¶ 9.

<sup>17</sup> Given the likely auction revenues from an auction of an 80 MHz swath of cleared, licensed AWS spectrum, reimbursement of reasonable relocation costs is unlikely to serve as a justifiable basis for failing to clear the spectrum for commercial use. See Spectrum Act at § 6701(j) (1) (sharing may be approved over clearing and relocation only if relocation “is not feasible because of technical or *cost* constraints.”)(emphasis added).

characteristics that should permit commercial parties to better understand what can be done to properly model an analysis of real-world interference environments between Federal and commercial users.

It would be premature to adopt any “overlay license” regime<sup>18</sup> unless and until it is determined that clearing the spectrum for commercial use through relocation, as Congress directs, is not feasible, and that mutually acceptable sharing mechanisms cannot be adopted. Overlay licenses would amount to consigning commercial mobile to secondary status, which would be unlikely to generate sufficient auction revenue to cover even modest relocation costs, and would inhibit deployment. Moreover, considering overlay licenses assumes both a failure by Federal users to relocate and a further failure to adopt mutually acceptable sharing mechanisms in a timely manner. Such an assumption, at this stage, is likely to ensure that relocation does not occur and mutually acceptable sharing mechanisms are never developed. In short, assuming failure is sure to bring it about, and such a policy would thereby squander a rare opportunity to address the looming spectrum shortage.

#### **IV. The Commission Should Adopt Sharing and Coordination Rules for the 1695-1710 MHz Band That Comport with the Recommendations of CSMAC Working Group 1.**

Regarding the 1695-1710 MHz band, AT&T generally agrees with the spectrum sharing recommendations of CSMAC Working Group 1.<sup>19</sup> The use of protection zones, rather than exclusion zones, holds the promise of greatly increasing the utility of this spectrum. While more work needs to be done with regard to propagation modeling, including better data on the effects

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<sup>18</sup> *AWS-3 NPRM* at ¶ 76.

<sup>19</sup> *See generally AWS-3 NPRM* at ¶¶ 54-72. As noted above, AT&T believes that NTIA and the Commission should continue to follow the directive of Congress, and consider whether federal uses in this block could be relocated to other bands. Ultimately, this block will never be fully utilized, or reach its full value to the public (or to carriers), so long as federal users remain.

of terrain and clutter using real world LTE network models, as well as the specifics of interference protection criteria and specific coordination procedures, the basic framework and methodologies regarding protection zones, coordination approaches, interference protection criteria, interference analysis methodologies, identification of protection sites, and protection distances are sound.

**V. The Commission Should Adopt Technical Service Rules for the AWS-3 Spectrum Bands that are Consistent with Existing Technical Service Rules for AWS-1 Spectrum Bands and 3GPP Specifications.**

AT&T supports the adoption of technical service rules for the AWS-3 spectrum bands that are equivalent to those that apply to the Part 27 rules that apply to AWS-1.<sup>20</sup> Indeed, consistency between the technical service rules for the AWS-3 spectrum bands and the technical service rules for the AWS-1 spectrum bands is necessary to achieve the full benefit from the adoption of the proposed band plan. Technical service rules in AWS-3 consistent with those in AWS-1 would make possible the creation of single, combined band class. As noted above, such a consolidated AWS band would be internationally harmonized, would speed deployment, lower deployment costs through economies of scale, promote competition, increase auction valuations and amplify the public interest benefits of making this additional spectrum available.

AT&T supports the Commission's proposal to adopt AWS-1 OOB limits,  $43 + 10 \log(P)$  dB, in all the AWS-3 blocks.<sup>21</sup> AT&T also endorses the Commission's proposals with respect to power limitations, with one exception.<sup>22</sup> The Commission proposes to adopt an EIRP power limit of 20 dBm for mobiles and portables operating in the 1695-1710 MHz and 1755-

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<sup>20</sup> *AWS-3 NPRM* at ¶ 85.

<sup>21</sup> *AWS-3 NPRM* at ¶¶ 86-95.

<sup>22</sup> *AWS-3 NPRM* at ¶¶ 99-102.

1780 MHz bands. The notion is that by limiting mobiles to an EIRP that likely mirrors their real world operating characteristics, device performance would not be impaired, but the size of any protection zones that might be needed around federal user sites could be reduced.<sup>23</sup>

A 20 dBm EIRP limit on mobiles would not only depart from the Part 27 rules that apply to AWS-1, but would effectively require the adoption of a separate 3GPP standard for AWS-3. The 3GPP standard for AWS-1 allows a maximum EIRP power limit of 23 dBm +/- 2 dB for mobiles and portables. Forcing AWS-3 onto a separate, different 3GPP standard for AWS-3 would outweigh any benefit that might accrue from a marginal reduction in a protection zone. Because we are discussing protection zones, not exclusion zones, non-interfering uses within these zones would not be prohibited, provided they were coordinated in advance. Accordingly, the benefit from maintaining consistent rules across the AWS-1/AWS-3 band should be achievable without reducing the actual utilization of this spectrum for mobile broadband service. Indeed, it is unclear at this point whether there actually would be any need to enlarge protection zones if the Part 27 rules apply.

## **VI. License Terms and Performance Requirements Should Account for Timing of Spectrum Availability.**

AT&T generally agrees with the Commission's proposed license terms. In particular, AT&T agrees with the Commission's proposals to license AWS-3 spectrum in 5 MHz blocks on an Economic Area (EA) basis.<sup>24</sup> AT&T also agrees that to avoid both co-channel and adjacent co-channel interference, base and fixed station transmit should be permitted (but not mobile

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<sup>23</sup> *AWS-3 NPRM* at ¶ 103.

<sup>24</sup> *AWS-3 NPRM* at ¶¶ 47, 52. AT&T notes that because EA nest into MEA, which nest into REAG, such a license size would also facilitate the use of hierarchical package bidding (HPB) in an AWS-3 auction, an auction feature that accommodates a variety of auction strategies while minimizing the "exposure problem." *See, e.g.* In the Matter of Expanding the Economic and Innovation Opportunities of Spectrum through Incentive Auctions, GN Docket No. 12-268, Comments of AT&T, Inc. at Ex. B (filed Jan. 25, 2013), Reply Comments of AT&T, Inc. at Ex. C (filed March 12, 2013).

transmit operations) in the downlink bands, 2155-2180 MHz and the additional 15 MHz of contiguous spectrum to be paired with 1695-1710 MHz.<sup>25</sup> Conversely, mobile transmit operations (but no fixed or base station downlink operations) would be permitted in the uplink bands, 1695-1710 MHz and 1755-1780 MHz.<sup>26</sup> We agree that the flexible use and eligibility policies in Part 27 should apply.<sup>27</sup> We also agree that the initial assignments, in accordance with Congress' mandate, should be through a system of competitive bidding.<sup>28</sup> AT&T reserves its comments on the specifics of any auction rules to be proposed until the Commission should open a rulemaking for that purpose. However, in the event that plans for spectrum clearing, relocation, or if necessary, sharing with residual federal uses have sufficient progressed by that time, AT&T submits that the use of customary simultaneous multiple-round auction rules used by the Commission in past auctions would likely serve to boost participation. To maximize participation and competition in the auction, AT&T also proposes that the Commission follow the open auction format it has followed so successfully in every auction during this century.<sup>29</sup>

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<sup>25</sup> *AWS-3 NPRM* at ¶ 43

<sup>26</sup> *AWS-3 NPRM* at ¶ 44.

<sup>27</sup> *AWS-3 NPRM* at ¶¶ 115, 121.

<sup>28</sup> *AWS-3 NPRM* at ¶ 114.

<sup>29</sup> See generally *AWS-3 NPRM* at ¶¶ 122-123. It would be a mistake to use set asides, caps and other restrictions on participation designed to steer spectrum to or away from particular groups of competitors. Such competition-distorting regulation is unwarranted, unwise, and likely unlawful. . The Commission knows how to address aggregations of spectrum that may threaten competition. It should not artificially reduce competition in auctions, as some have proposed, to try to ensure a predetermined outcome. See Comments of AT&T Inc., *Policies Regarding Mobile Spectrum Holdings*, WT Docket No. 12-269, at 11-12, 59 (Nov. 28, 2012); see also *id.*, Attach. A at ¶¶ 67-69 (Declaration of Mark Israel and Michael Katz); Letter of Wayne Watts, Senior Vice President and General Counsel, AT&T to Chairman Julius Genachowski of the Federal Communications Commission (April 24, 2013) (filed in WT Docket No. 12-269).

AT&T also generally agrees with the Commission's proposals regarding license term, performance requirements and renewal.<sup>30</sup> We agree that performance requirements are needed to ensure that spectrum is deployed promptly. The proposed requirements, to provide reliable signal coverage and offer service to at least 40 percent of the population within 4 years and to least 75 percent of the population by the end of 10 years, is reasonable and reasonably consistent with the requirements that apply to other recent allocations.<sup>31</sup> We also agree with the penalty that would apply for failure to meet the interim buildout, but recommend that the penalty for missing the final buildout should be an automatic "keep what you use" rule, with the license authorization automatically terminated for any unserved areas, consistent with the requirements that apply in the 700 MHz bands.<sup>32</sup> It would not be in the public interest to cut off service to the public through an automatic license termination in a case, for example, where a carrier is providing substantial service and covers 70 percent of the population.

Moreover, AT&T submits that the build out period should not necessarily begin on the license grant date, but at the time when the licensed spectrum becomes available. It will not be clear, until transition plans have been filed and approved, how long it might take for federal users to relocate out of the bands being reallocated for commercial use. It might be 4-5 years before a licensee is able to begin to construct and operate a network using this spectrum due to spectrum unavailability.<sup>33</sup> Accordingly, AT&T believes that the FCC should consider starting the build

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<sup>30</sup> *AWS-3 NPRM* at ¶¶ 124-129, 134.

<sup>31</sup> *AWS-3 NPRM* at ¶¶ 126-129.

<sup>32</sup> *AWS-3 NPRM* at ¶¶ 130-131.

<sup>33</sup> The most likely scenario is that the uplink bands -- currently occupied by federal use's -- are likely to be unavailable at license grant, but that the downlink bands may be. It is no answer, however, to suggest that carriers should meet their build requirements by deploying downlink-only while waiting for the uplink spectrum to be made available. This would be wasteful at best for existing carriers, who would be forced to deploy the downlinks in the

out period on a date certain to be determined in consultation with the NTIA as the final transition date, as the FCC did in the 700 MHz band when the DTV transition was delayed.

With respect to license term, AT&T agrees with the proposed 10 year term.<sup>34</sup> Due to the likelihood that some or all of the spectrum might be unavailable at grant, AT&T proposes that should it extend the build out schedule, it should also extend the license term by the same interval, as it did in the 700 MHz band. In the alternative, the Commission should consider a 15 year initial term, as it did in AWS-1 (for largely the same reasons).

AT&T opposes the proposed renewal showing outlined in paragraph 135 of the NPRM. To require carriers to make a detailed description of the “level and quality of service provided,” including the area served, the population served, the number of subscribers the services offered, the date service commenced, whether it has ever been interrupted, the length of any such outage, the extent to which rural areas are served, the extent to which Tribal Lands are served, and “any other factors associated with the level of service to the public,” would be unduly burdensome, costly and unnecessary. Moreover, many of these facts are already provided to the Commission or are readily available. Carriers commonly compete over the level and quality of the service provided, the area served and the services offered. Such information can be found in marketing and advertising materials in stores and on-line. For most providers, the number of subscribers is already reported on Form 477. Similarly, the Commission also requires outage reporting. The extent to which rural areas and Tribal Lands are served is commonly displayed in street level coverage maps on carrier sites.

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interim, then redeploy once the uplinks became available, and it would be impossible for new entrants, who may lack existing bands with which to combine the downlinks.

<sup>34</sup> AWS-3 NPRM at ¶¶ 124-125.

At renewal, the Commission can reasonably meet its obligation to ensure that the spectrum is being used in the public interest by having the licensee certify that it has maintained continuous service (defined as no interruption of service lasting more than 180 days)<sup>35</sup> since its interim build requirement date, that it has met its final build requirement, and otherwise complied with Communications Act and Commission Rules during the license term. This should, as the Commission proposes in paragraph 136, be sufficient to obtain renewal expectancy at the end of the term. If so, then what on earth is the purpose of the voluminous, burdensome, redundant, unnecessary and lengthy renewal showing proposed in paragraph 135? Such a requirement would impose substantial costs on licensees and FCC staff alike, with no identifiable benefit, and should therefore be rejected.

## **VII. Conclusion**

AT&T applauds the Commission for moving rapidly to develop service rules for the AWS-3 band. The Commission has a rare opportunity to adopt a band plan and service rules that effectively would add 80 MHz of contiguous, prime, paired spectrum to the 90 MHz AWS-1 allocation. The benefits of such an approach should be obvious---to greatly increase the value

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<sup>35</sup> AT&T does not object to the Commission's permanent discontinuance proposal in ¶ 138, but the Commission should clarify that service provided by a lessee would be counted, both toward meeting the proposed performance requirements, and as continuous service, as it would under the existing secondary market rules. *See, e.g.* 47 C.F.R. § 1.9030(d)(5).

and utility of the AWS-3 spectrum, to promote competition, and to benefit the more than 300 million users of mobile broadband in the United States by taking a major step toward alleviating the spectrum crunch.

Respectfully submitted,

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