

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

In the Matter of	)	
	)	
Service Rules for the 698-746, 747-762	)	WT Docket No. 06-150
and 777-792 MHz Bands	)	
	)	
Revision of the Commission's Rules to Ensure	)	CC Docket No. 94-102
Compatibility with Enhanced 911 Emergency	)	
Calling Systems	)	
	)	
Section 68.4(a) of the Commission's Rules	)	WT Docket No. 01-309
Governing Hearing Aid-Compatible	)	
Telephones	)	

**REPLY COMMENTS OF AT&T INC.**

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**REPLY COMMENTS OF AT&T INC.**

AT&T Inc., on behalf of its affiliates, ("AT&T") hereby submits the following reply comments in response to the Notice of Proposed Rulemaking in the above-referenced proceeding.<sup>1</sup>

**SUMMARY AND INTRODUCTION**

Consistent with its longstanding reliance on market forces to assign spectrum to its highest value use, the Commission established flexible service rules for commercial services in the 700 MHz Band and determined that license service areas based on Economic Area Groupings (EAGs) were "the most efficiently sized geographic areas" to promote the development and rapid deployment of the wide range of new advanced broadband services that may be provided over this spectrum. The comments demonstrate that EAGs continue to provide significant advantages over smaller license areas and will promote the most efficient and intensive use of this spectrum. AT&T, Motorola, Qualcomm, Verizon Wireless and other parties

show that the use of EAGs will provide greater opportunities for efficiencies encouraging optimal development and deployment of new broadband technologies and services making maximum use of the enhanced propagation characteristics of 700 MHz Band spectrum. Additionally, the comments by these and other parties show that the further licensing of 700 MHz spectrum in more fragmented smaller market areas is unlikely to be as successful. Smaller market areas are unlikely to overcome the underlying economic factors that govern sustainable deployment in rural areas regardless of the availability of spectrum, and are likely to result in increased cost and delay in the development of new services optimizing the benefits of 700 MHz spectrum. The Commission, accordingly, should continue to license this spectrum based on EAG service areas.

The comments also show wide support for the Commission's existing secondary market policies and performance standards for 700 MHz spectrum, which use market-based incentives to encourage increased deployment and usage, and strong opposition to the proposals for new regulation of 700 MHz Band spectrum that are included in the Notice. Commenters emphasize that the Commission should not undermine its flexible, market-based approach to the re-sizing of geographic market areas by establishing mandatory requirements for secondary market negotiations that would add unnecessary cost and delay to these transactions. Most commenters also oppose rigid performance requirements for 700 MHz band spectrum, with both large and small carriers expressing significant concern that such regulation would require uneconomic service deployment that would raise costs and prices and limit incentives for investment.

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<sup>1</sup> Notice of Proposed Rulemaking, Fourth Further Notice of Proposed Rulemaking, and Second Further Notice of Proposed Rulemaking, FCC 06-114 (rel. Aug. 10, 2006) ("Notice").

As most commenters emphasize, the Commission should continue to encourage development of this spectrum by using the same substantial service performance standard – and by providing the same strong renewal expectancy based on fulfillment of this standard – that applies to other Part 27 spectrum licensees. The flexibility provided by the existing standard encourages the deployment of advanced services in accordance with unique business plans and market demands, furthers the Commission’s policy that market forces, rather than regulation, should direct the development of commercial mobile services, and provides the regulatory parity that is also supported by longstanding Commission policy for commercial mobile services.

In addition, as urged by a number of commenters, the Commission should establish initial license terms of 15 years similar to those adopted for AWS services to increase incentives to invest in the development of next generation networks and new services to provide the benefits of this new spectrum to consumers. The comments also show broad support for the application of 911/E911 and hearing aid-compatibility requirements to 700 MHz spectrum licensees meeting the relevant criteria for such treatment, including the provision of two-way voice services interconnected to the public switched network.

**I. THE COMMENTS AFFIRM THAT EAG LICENSE SERVICE AREAS WILL BEST PROMOTE EFFICIENT USAGE AND RAPID SERVICE DEPLOYMENT**

The comments in this proceeding demonstrate the wide range of potential new fixed and mobile broadband services that may be offered through commercial use of 700 MHz spectrum, including next generation high speed wireless services, and new real time multicast mobile video services. For example, Cingular (p. 3) emphasizes the significant existing consumer demand for streaming video, Internet transmission, and entertainment services requiring substantial high speed bandwidth. Qualcomm (p. 4) states that it already has made substantial investments to develop and deploy new audio, data and video services over this spectrum. Access Spectrum (p.

2) similarly forecasts the development of new so-called “4G” services providing “media and web services, including full motion video, on a range of mobile and nomadic devices.”

The Commission found EAGs offer significant advantages over other geographic license sizes to encourage optimal development and deployment of new products and services through commercial usage of this spectrum. EAGs facilitate “alternative aggregation approaches to suit a wide variety of services and business plans,” including the provision of service on a nationwide or regional basis.<sup>2</sup> The Commission determined that EAGs thus allow greater economies of scale and other efficiencies to offer new services and technologies over this spectrum, while avoiding the aggregation costs resulting from the use of smaller license areas.<sup>3</sup>

AT&T, Motorola, Qualcomm, Verizon Wireless and other parties demonstrate that the Commission’s findings in establishing the existing EAG license service areas for 700 MHz Band spectrum provide compelling support for the continued use of EAGs. As these commenters show, EAGs continue to offer significant advantages over smaller geographic license sizes in stimulating optimal development and deployment to U.S. consumers of the wide range of new technologies, products and services that may be provided through commercial use of this spectrum. The Commission accordingly should reaffirm its former findings and continue the use of EAGs for all unauctioned 700 MHz Band spectrum blocks.<sup>4</sup>

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<sup>2</sup> *Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission’s Rules*, WT Docket No. 99-168, First Report and Order, 15 FCC Rcd. 476, ¶ 59 (2000) (“Upper 700 MHz Band Order”).

<sup>3</sup> *Id.*, ¶¶ 59-61; *Reallocation and Service Rules for the 698-746 MHz Spectrum Band (Television Channels 52-59)*, GN Docket No. 01-74, Report and Order, 17 FCC Rcd. 1022, 1025 ¶¶ 93-94 (2002) (“Lower 700 MHz Band Order”).

<sup>4</sup> See Cingular at 9; Motorola at 3; Qualcomm at 16-17; Verizon Wireless at 5 (“It is imperative that the Commission keep the existing band plan.”).

**1. The Comments Highlight the Advantages of EAGs for 700MHz Spectrum**

AT&T, Motorola, Qualcomm and Verizon Wireless, among others, demonstrate that EAGs remain “the most efficiently sized” areas to deliver the potential benefits of 700 MHz Band spectrum to U.S. consumers, as the Commission previously found, and that there is no basis for any change in the existing band plan.<sup>5</sup> AT&T (p. 7), DirectTV/EchoStar (p. 4) and Verizon Wireless (p. 5) emphasize that large geographic service areas allow opportunities for economies of scope and scale and other efficiencies to encourage technology development, equipment manufacture and the supply of content to exploit the full benefits of this spectrum for consumers.<sup>6</sup> Qualcomm emphasizes (pp. 17, 19) that wireless industry economies of scale favor both deployment and continued licensing of this spectrum over large geographic areas. Qualcomm (pp. 18-19) further states that the technologies it will use to deploy third generation mobile audio, data and video services on a nationwide basis, in addition to other technologies, “are most economically deployed across large geographic areas, . . . consistent with the existing band plan.”<sup>7</sup>

Motorola (p. 7) underscores that consumers expect “nationwide, if not global” mobile service and that large regional and national service areas increase deployment opportunities for WiMAX and other new technologies. These comments affirm that, as noted by Verizon Wireless (p. 5), the continued use of the existing band plan will lead to “rapid deployment of

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<sup>5</sup> Upper 700 MHz Band Order, ¶ 57.

<sup>6</sup> *See also*, Access Spectrum, Rosston Aff. at 21 (“As with most high technology equipment, the 700 equipment is likely to exhibit a substantial learning curve and large economies of scale in manufacturing.”).

<sup>7</sup> Qualcomm will undertake this deployment pursuant to its existing EAG licenses for Block D in the Lower 700 MHz Band. Qualcomm at 6.

service, promote interoperability and the setting of standards, and allow economies of scale that will encourage the development of low cost equipment.”

The superior propagation qualities of 700 MHz Band spectrum further support the use of large service areas to encourage the optimal development and deployment of new services. Qualcomm cites (p. 15) the “favorable propagation characteristics of the 700 MHz spectrum” as making its nationwide network “economically feasible.”<sup>8</sup> As shown by Qualcomm, Motorola and other commenters, the continued use of the existing EAG license service areas will encourage development and deployment of new technologies and services making maximum use of the propagation characteristics of 700 MHz Band spectrum.

The benefits of EAGs also are shown by the greater efficiencies and lower consumer rates resulting from the use of large wireless industry service footprints. The Commission underscored in adopting EAGs for all but one block of the Lower 700 MHz Band that nationwide service allows the achievement of efficiencies available to nationwide mobile operators that bring “reduce[d] prices to consumers.”<sup>9</sup> This finding is supported by Access Spectrum, which notes that “it has long been evident that commercial wireless services are provided efficiently over relatively large geographic areas.”<sup>10</sup> The Commission similarly recognizes in its most recent annual report on CMRS competition that mobile carriers with larger footprints can obtain greater economies of scale and other efficiencies than those with smaller

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<sup>8</sup> See also, Qualcomm at 7 (stating that the higher power limit of the Lower 700 MHz “together with the favorable propagation of a radio signal at 700 MHz . . . allowed Qualcomm to design MediaFLO so that markets, even large markets, can be covered with only one or a few transmitters”).

<sup>9</sup> Lower 700 MHz Band Order, ¶ 93.

<sup>10</sup> Access Spectrum, Rosston/Wallsten Decl., ¶ 33.

footprints.<sup>11</sup> Indeed, the Commission repeatedly has recognized the consumer benefits of expanded wireless service area footprints at both the national and regional level from “enhanced services and/or lower prices.”<sup>12</sup> The service benefits of large areas include a “wider area in which the carrier’s full handset functionality is fully operative,” thereby removing a significant potential impediment to optimal development and deployment of next generation mobile broadband services using enhanced features and functionality.

The continuing consumer benefits from wireless industry competition show the well-founded nature of the Commission’s decision to establish large service areas in order to encourage similar efficiencies in the development and deployment of new services over 700 MHz Band spectrum. The Commission finds in its most recent CMRS competition report that “robust” competition in the CMRS market “continues to drive carriers to introduce innovative pricing plans and service offerings” and that “the deployment of next-generation networks based on competing technological standards continues to be an important dimension of non-price rivalry.”<sup>13</sup>

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<sup>11</sup> *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services*, Eleventh Report, WT Dkt. No. 06-17, ¶ 55 (rel. Sept. 29, 2006) (“Eleventh CMRS Report”).

<sup>12</sup> *Applications of Western Wireless Corp. & Alltel Corp.*, 20 FCC Rcd. 13053, Memorandum, Opinion & Order, FCC 05-138, ¶ 140 (2005); *Applications of AT&T Wireless Services, Inc. & Cingular Wireless Corp.*, Memorandum, Opinion & Order, FCC 04-255, 19 FCC Rcd. 21,522, ¶ 217 (2004).

<sup>13</sup> Eleventh CMRS Report, ¶¶ 3, 213. The resulting “significant benefits to consumers” include an increase in mobile subscribership in the most recent 12-month period from 184.7 million to 213 million, increased wireless call usage, and a 97 percent increase in SMS traffic volumes. *Id.*, ¶ 5. Further, “98 percent of the total U.S. population lives in counties with access to three or more different operators offering mobile telephone service, slightly higher than the previous year, and up from 88 percent in 2000.” *Id.*, ¶ 2. *See also*, CTIA at 3 (describing wireless broadband growth).

The use of EAGs also avoids the greater aggregation costs and uncertainty resulting from efforts to aggregate smaller license areas, as the Commission found in establishing EAG service areas for 700 MHz Band spectrum. Indeed, Access Spectrum contends that the higher average prices paid for Regional Economic Area Grouping (REAG) licenses in the recent AWS auction were “in part due to the risk associated with trying to aggregate the smaller blocks into efficient sized areas.”<sup>14</sup> Motorola concurs (p. 7) that the prospect of additional costs “to aggregate additional licenses and coverage areas to meet wireless customer needs” led bidders to value these licenses differently.

Further, EAGs provide flexibility for both further aggregation and disaggregation. Qualcomm’s development of its nationwide MediaFLO service based on EAG licenses for Lower 700 MHz Band Block D spectrum demonstrates that these geographic areas “allow aggregation into a nationwide service area,” as the Commission found in adopting EAGs.<sup>15</sup> The Commission also determined that EAGs address the needs of providers with regional interests and may be partitioned into smaller areas.<sup>16</sup> This finding is supported by the results of the recent AWS auction, in which the successful bidders for REAGs included regional operators and their small business affiliates.<sup>17</sup> Indeed, one of those bidders has already announced that it may sell some of this spectrum.<sup>18</sup>

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<sup>14</sup> Access Spectrum, Rosston/Wallsten Dec., at 15. *See also*, AT&T at 3, n.5 (citing report showing weighted average prices of \$0.66 per MHzPop for REAG licenses, \$0.46 per MHzPop for Economic Area (EA) licenses, and \$0.40 per MHzPop for CMA licenses).

<sup>15</sup> Upper 700 MHz Band Order, ¶ 60.

<sup>16</sup> *Id.*, ¶ 61.

<sup>17</sup> *See* FCC Advanced Wireless Services Auction 66, Att. A., (listing winning bids for REAGs by MetroPCS AWS, LLC, Denali Spectrum License, LLC, Barat Wireless, L.P., and Cricket Licensee (Reaction), Inc.)

<sup>18</sup> Leap Wireless International, Inc., Form 8-K, Oct. 5, 2006, at 2 (Leap Wireless International “may seek to partner with others, sell spectrum or pursue alternative products or services to

The comments thus affirm that EAGs continue to offer significant advantages over smaller license areas in encouraging optimal development and deployment of new services maximizing potential economies of scale, other efficiencies and the propagation qualities of this spectrum and that the Commission accordingly should maintain the existing band plan.

## **2. The Further Allocation of 700 MHz Spectrum to Small License Areas is Unnecessary to Ensure Optimal Deployment**

There is also no basis to claims that the licensing of this spectrum based on EAGs will impede deployment in rural areas. As AT&T emphasized (p. 9), market incentives will ensure that licensees will seek to serve every potential customer as soon as it is economically feasible to do so. The comments underscore that the Commission’s competitive bidding procedures provide compelling financial and market incentives for licensees to optimize usage in all geographic areas.<sup>19</sup> Corr (p. 5) affirms, for example, that optimal usage is ensured by “the ‘invisible hand’ of economic logic.” Further market incentives are provided by the Commission’s secondary market policies, which ensure that licensees failing to make maximum usage of licensed spectrum incur a significant opportunity cost. As noted by MetroPCS (p. 15), licensees have a major “economic incentive to put the spectrum to beneficial uses – and to partition areas in which the initial licensee may not have an immediate need.”

U.S. Cellular similarly acknowledges (p. 14) that these and other FCC market-based rules, such as flexible substantial service policies, including the rural safe harbor, “encourage

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utilize or benefit” from large regional area spectrum obtained in the recent AWS auction that “may not be well suited” for service by its affiliate Cricket Licensee (Reauction), Inc.).

<sup>19</sup> See, e.g., AT&T at 9 & 13; MetroPCS at 15 (noting the substantial potential purchase prices for 700 MHz Band spectrum indicated by Auction 66); Dobson at 8 (“licensees have invested substantial sums of money to obtain their authorizations and have every incentive to put the spectrum to its greatest use.”).

carriers to provide service on the broadest geographic basis possible.”<sup>20</sup> Indeed, the Commission found in 2004 that its market-oriented policies have brought “the widespread provision of wireless services, including in rural areas” and “competition in the rural marketplace, especially with regard to CMRS.”<sup>21</sup> Since then, the percentage of the U.S. population living in counties with three or more mobile providers has increased from 95 percent to 98 percent.<sup>22</sup> Further, the Commission also found in its most recent CMRS Competition Report that “an average of 3.6 mobile competitors” serve less densely-populated countries and that “CMRS providers are competing effectively in rural areas.”<sup>23</sup>

The commenters also fail to support their claims that additional 700 MHz block spectrum licensed in smaller market areas will encourage greater rural deployment. The Commission rejected similar claims when it established the present licensing rules based on EAGs finding that “inefficiently small” license areas would result in aggregation costs and delay that “may harm service providers and customers alike.”<sup>24</sup> Those concerns remain equally relevant today. As noted by Cingular (p. 6), the Commission has found the CMA market sizes advocated by a number of commenters in this proceeding are too small for most new services, including

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<sup>20</sup> AT&T at 10, 13; Cingular at 8. *See also, Facilitating the Provision of Spectrum-Based Services to Rural Areas and Promoting Opportunities For Rural Telephone Companies to Provide Spectrum-Based Services*, Report and Order and Further Notice of Proposed Rulemaking, WT Dkt. No. 02-381, 19 FCC Rcd. 19,078, ¶ 6 (2004) (“Rural Report and Order”).

<sup>21</sup> *Id.*.

<sup>22</sup> *See id.* (noting the Commission’s finding in the Eighth Competition Report that 95 percent of the total U.S. population lives in counties with three or more providers); Eleventh CMRS Report, ¶ 2 (reporting that 98 percent of the U.S. population lives in counties with three or more mobile providers). *See also, id.* ¶ 115 (“Virtually the entire population of [the] United States live in counties where operators offer digital mobile telephone technologies using CDMA, TDMA/GSM, or iDEN (including their respective next generation technologies), or some combination of the three.”).

<sup>23</sup> *Id.*, ¶¶ 86, 88.

<sup>24</sup> Upper 700 MHz Band Order, ¶ 59.

Personal Communications Service, Specialized Mobile Radio Service and Local Multipoint Distribution Service. To encourage optimal development and deployment of the wide range of potential new services using the superior propagation qualities of 700 MHz spectrum, the Commission should make the same finding here thereby allowing service providers to achieve potential efficiencies and economies of scale without incurring the costs, delay and uncertainty that are likely to frustrate efforts to aggregate smaller areas.<sup>25</sup>

Contrary to the claims by NTCA (p. 4) and U.S. Cellular (p. 4) that capacity limitations will restrict the utility of 700 MHz Band spectrum in more heavily populated areas, the enhanced propagation characteristics of 700 MHz Band spectrum will provide more cost-effective indoor coverage than other frequencies such as PCS or AWS, thereby meeting consumer demand for ubiquitous broadband service in urban streets and buildings as well as in cars and rural areas. Large service footprints will allow the realization of significant efficiencies that will facilitate the more rapid deployment for consumers of new advanced broadband services using the greater propagation qualities of this spectrum in both rural and urban areas. NTCA and U.S. Cellular also overlook the potential uses of this spectrum for new mobile video distribution and multicast services, which are subject to no potential traffic capacity limitations, and are most economically deployed on a nationwide or large regional basis.

The record also demonstrates that licensing based on small geographic areas is unlikely to change the economic realities governing sustainable rural deployment. The commenters show that the economics of the provision of service in rural areas play a significant role in rural deployment, regardless of the availability of spectrum. As noted by CTIA (p. 12), “for every megahertz of spectrum available in densely populated areas, there is an equivalent amount of

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<sup>25</sup> The superior propagation qualities of 700 MHz spectrum also supports the use of larger service

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spectrum available in rural areas.”<sup>26</sup> Moreover, the Commission has observed that “because of economies of scale in wireless networks and lower population densities in rural areas, the economically efficient number of providers likely will be fewer.”<sup>27</sup> CTIA (p. 4) and other commenters describe the greater difficulties of providing service in rural areas.<sup>28</sup> Indeed, as described below, many rural carriers strongly oppose stricter performance requirements for this spectrum because of their concerns that such requirements would require rural area build-out that would not be economically viable.<sup>29</sup> Their comments underscore that licensing this spectrum in inefficiently small license areas will not overcome the underlying economic factors affecting sustainable rural deployment. Instead, such an approach is likely to delay the development and deployment of new services optimizing the benefits of this spectrum until licenses are aggregated into larger more efficient footprints.

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areas than those adopted for AWS services.

<sup>26</sup> See also, AT&T at 9-10 (describing the Lower 700 MHz Band, AWS and other spectrum already available for fixed and mobile broadband service in rural areas). See also, Verizon Wireless at 3-4; CTIA at 12.

<sup>27</sup> *Facilitating the Provision of Spectrum-Based Services to Rural Areas and Promoting Opportunities For Rural Telephone Companies to Provide Spectrum-Based Services*, Notice of Proposed Rulemaking, WT Dkt. No. 02-381, 18 FCC Rcd. 28802, ¶ 7 (2003) (“Rural Notice”). See also, Rural Report and Order, ¶ 14 (“certain rural areas [] are very difficult to serve because of high equipment costs, low population density, or other economic factors”); Eleventh CMRS Report, ¶ 88 (“Despite the smaller number of mobile operators in rural areas as compared to urban areas, there is no evidence in the record to indicate that this structural difference has enabled carriers in rural areas to raise prices above competitive levels or to alter terms and conditions of service to the detriment of rural consumers.”).

<sup>28</sup> See, e.g., D. Howard & F. Javed at 21 (noting “challenges of difficult terrain, computer adoption rates, internet usage and access to other needed infrastructure”). See also, Union at 6 (“rural or smaller carriers [] face more challenges in completing build-out requirements”).

<sup>29</sup> See, e.g., Corr at 5; Blooston at 6 (“geographic coverage benchmarks in rural areas can be impossible to meet in regions featuring pockets of inhabitants surrounded by large areas with population densities below twenty persons per square mile”).

### **3. The Commission Should Not Adopt Set-Asides for Designated Entities or Limited Spectrum Uses**

The Commission should reject the efforts of some commenters to overturn its flexible service rules for this spectrum and limit the beneficial effects of competitive bidding by designating specific blocks of the 700 MHz Band for particular services.<sup>30</sup> The existing flexible service rules specifically are intended to allow “a multitude” of potential uses “that the market may demand” and thus further the Commission’s longstanding market-based approach to spectrum allocation of encouraging market forces – rather than regulatory mandates – to assign spectrum to its highest valued use.<sup>31</sup> The comments amply demonstrate the wide range of potential services that may be provided over this spectrum and the Commission has properly declined to limit provider flexibility, restrict potential usage and deny consumers the full potential benefits of this spectrum by mandating particular services or technologies. Instead, the ultimate usage of this spectrum is properly determined through the competitive marketplace.

For similar reasons, the Commission also should reject the request by Nextwave (pp. 6-10) that all unauctioned 700 MHz Band spectrum should be reallocated to unpaired blocks to accommodate the use of time division duplex (“TDD”) systems. Most wireless broadband technologies currently available or in development, such as UMTS/HSDPA, LTE and 1xEV-DO, are frequency division duplex (“FDD”) technologies requiring paired spectrum. Nextwave’s approach would limit technology choices, services and capabilities for the 700 MHz Band, and

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<sup>30</sup> See Tropos Networks at 10 (requesting the reservation of Lower 700 MHz Band Blocks A and B for contention-based unlicensed operations); D. Howard & F. Javed at 40 (requesting reservation of one spectrum block for broadband unserved areas or fixed wireless broadband delivery).

<sup>31</sup> Lower 700 MHz Band Order, ¶¶ 65, 70.

reduce interoperability with existing wireless networks.<sup>32</sup> The existing rules already accommodate TDD technologies by providing Lower 700 MHz Band Block E as unpaired spectrum, in addition to the previously auctioned Lower 700 MHz Band unpaired Block D, and also allow the use of TDD over all paired spectrum blocks. By contrast, Nextwave asks the commission to pick a winning technology – something the Commission has properly rejected in the past.<sup>33</sup>

The Commission also should not limit the permissible licensees for any blocks of this spectrum to designated entities, or increase the bidding credits for such entities, as requested by some commenters.<sup>34</sup> Instead, the Commission should continue to encourage the rapid development and efficient usage of this spectrum by allowing all types of applicants to bid competitively for all spectrum blocks. The Lower 700 MHz Band C Block already is licensed in MSA/RSA service areas, and small business entities were the winning bidders for more than five hundred of these licenses.<sup>35</sup> Similarly, small business entities comprised over half the winning bidders in the recently completed Auction 66 for AWS spectrum.<sup>36</sup> Designated entity bidding

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<sup>32</sup> Nextwave's claims (p. 9) regarding the greater efficiency of TDD technology to accommodate smaller bandwidths for upstream transmission fail to recognize the rapid growth of upstream bandwidth-hungry broadband applications, such as video exchange, gaming, and other two-way multi-media services.

<sup>33</sup> *See Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996*, CC Docket No. 98-146, Report, 14 FCC Rcd. 2398, ¶ 5 (1999) ("Our role is not to pick winners and losers, or to select the best technology to meet consumer demand.").

<sup>34</sup> *See, e.g.*, NTCA at 8; RTG at 3; Council Tree at 13.

<sup>35</sup> Notice, Appendix, ¶ 14.

<sup>36</sup> FCC News Release, *FCC's Advanced Wireless Services (AWS) Spectrum Auction Concludes*, Sept. 18, 2006. *See also*, Rural Report and Order, ¶ 6 (noting that small business entities comprised 77 percent of the winning bidders in the 39 terrestrial wireless auctions held as of June 2004 and obtained 52 percent of the licenses sold in those auctions).

credits provide opportunities for these entities to obtain spectrum without foreclosing other applicants and the Commission's secondary market initiatives provide further opportunities for spectrum acquisition.

Further, Access Spectrum (p. 41) fails to show that a "significant" new bidding credit is required for commercial operators adjacent to public safety spectrum providing priority access for public safety uses. All operators should be eligible to provide priority access to public safety systems on a voluntary basis consistent with existing CMRS Priority Access Service rules and procedures.<sup>37</sup> Indeed, the Commission has previously declined to grant any "competitive advantage" to particular types of CMRS systems in offering priority access service to public safety systems.<sup>38</sup>

**II. IF OTHER MARKET SIZES ARE CHOSEN, THE COMMISSION SHOULD CHANGE NO MORE THAN ONE BLOCK FROM THE CURRENT EAG FORMAT AND SHOULD MAKE NO CHANGES TO THE LOWER 700 MHZ BAND**

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As described above, the existing EAG geographic service areas for 700 MHz Band spectrum, complemented by commercially negotiated secondary market arrangements, will ensure optimal deployment of new services using this spectrum in all geographic areas, including rural areas, and also will provide opportunities for suppliers to serve regional or smaller areas. For these reasons, if the Commission ultimately determines to license more of this spectrum in smaller geographic service areas, it should devote no more than one block for this amended approach. In addition, to avoid restricting the development of new services that may be offered

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<sup>37</sup> See 47 C.F.R. Sect. 64.402.

<sup>38</sup> *Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Requirements Through the Year 2010*, WT Dkt. No. 96-86, 15 FCC Rcd. 16720, ¶ 21 (2000) (noting that "federal policy generally favors regulatory symmetry among competing or potentially competing CMRS providers").

to consumers under the higher power limit of the Lower 700 MHz Band, any such reallocation of geographic market sizes should be limited to the Upper 700 MHz Band.

As shown above, extensive reallocation of 700 MHz Band spectrum is not necessary to ensure optimum utilization of this spectrum in rural areas. Instead, it is likely to result in sub-optimal, higher cost usage that will limit the development and deployment of new services. The Lower 700 MHz Band C Block already is licensed under MSAs and RSAs specifically to accommodate the requests in the Lower 700 MHz Band proceeding for the use of smaller geographic areas.<sup>39</sup> The licensing of, at most, one additional block of 700 MHz Band spectrum in smaller geographic areas would provide more than sufficient variation in initial license sizes, while avoiding the greater aggregation costs and other inefficiencies likely to result from the reallocation of a larger number of blocks to smaller license areas.

Additionally, to avoid limiting opportunities for potential new mobile video and entertainment services over 700 MHz spectrum, the Commission should confine any reallocation of market sizes to the Upper 700 MHz Band. The Commission established the higher maximum power limit of 50 kW ERP for the Lower 700 MHz Band with the specific purpose of promoting the “most efficient” spectrum usage, including through development of new “broadcast-type” services.<sup>40</sup> The Commission similarly adopted 6 and 12 megahertz blocks for the Lower 700 MHz Band to accommodate such services.<sup>41</sup> Because of the higher power limit, the use of the Lower 700 MHz Band is well-suited to new mobile video distribution and multicast services requiring large license areas and nationwide coverage. Indeed, Qualcomm (pp. 5, 7) cites the 50 kW power limit as the major reason for its use of the Lower 700 MHz Band for this purpose. To

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<sup>39</sup> Lower 700 MHz Band Order, ¶ 96.

<sup>40</sup> *Id.*, ¶ 103.

maximize the potential scope of other potential new video and entertainment services by facilitating their provision on a regional or nationwide basis with continuous coverage for mobile users, the Commission should maintain Lower 700 MHz Band service areas based on EAGs.

While several commenters suggest the use of package bidding, the potential use of this approach is not raised in the Notice and should be addressed in the separate proceeding in which the Commission establishes auction-specific procedures for each auction, including minimum opening bids, reserve prices and other procedural matters, including the possible use of package bidding.<sup>42</sup> Thus, the Commission’s Public Notice on auction procedures for the recently-completed AWS auction specifically requested comment on “Simultaneous Multiple Round Auction(s)—with or without Package Bidding.”<sup>43</sup> Similarly here, any consideration of package bidding raises complex issues concerning the optimal number of potential packages and other matters that are properly addressed in this further proceeding.

### **III. THE COMMISSION SHOULD MAINTAIN POWER LIMITS**

The comments show wide support for the continuation of the existing power limits, including the higher power limit for the Lower 700 MHz Band.<sup>44</sup> As described above, the higher maximum power limit of 50 kW ERP for the Lower 700 MHz Band was specifically intended to promote maximum flexibility in the development and deployment of new services and has

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<sup>41</sup> *Id.*

<sup>42</sup> *See Auction of 1.4 GHz Bands Licenses Scheduled for February 7, 2007*, Public Notice, DA 06-1016, AU Dkt. No. 06-104, Aug. 28, 2006, at A.1. (requesting comment on package bidding); *Auction of Regional Narrowband PCS Licenses Scheduled for September 24, 2003*, Public Notice, DA 03-1065, 18 FCC Rcd. 6366 (2003) at 1 (seeking comment on “package bidding procedures, reserve prices or minimum opening bids, and other auction procedures”).

<sup>43</sup> *Auction of Advanced Wireless Services Scheduled for June 29, 2006*, Public Notice, AU Dkt. No. 06-30, Jan. 31, 2006, at A.1.

significant potential usage for the nationwide deployment of new mobile video and entertainment services. Indeed, Qualcomm states (pp. 22-23) that it has made substantial investments to develop its MediaFLO network for this purpose in compliance with this existing limit and other Lower 700 MHz Band licensees also cite their reliance on this limit.<sup>45</sup> There is no evidence supporting any reduction in this limit, which would adversely affect all licensees seeking to use this higher power limit to deploy new services.<sup>46</sup> The Commission accordingly should maintain the existing limit to optimize usage and potential consumer benefits of this spectrum. Further, as suggested by AT&T (p. 12), increased power limits should be considered for rural areas, similar to the higher rural area power limits for cellular, PCS and AWS services.

**IV. THE COMMISSION SHOULD RETAIN ITS MARKET-BASED POLICIES FOR THIS SPECTRUM AND SHOULD PROVIDE STRONG RENEWAL EXPECTANCIES BASED ON THE SUBSTANTIAL SERVICE STANDARD**

There is wide support for the Commission’s existing secondary market policies and performance standards for 700 MHz spectrum and strong opposition to the proposals for new regulation included in the Notice. The comments affirm that the Commission’s current rules are bringing increased deployment and usage in rural areas, and that efforts to mandate secondary market negotiations or rigid build-out requirements would add unnecessary cost, delay and other

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<sup>44</sup> See, e.g., AT&T at 11-12; CTIA at 20; C&W Enterprises at 5; Qualcomm at 22; Corr at 8-9.

<sup>45</sup> Qualcomm at 23 (any change in this rule would delay the deployment of existing systems and chill future investment); Corr at 7 (power reduction would “eviscerate” the value of existing licenses); C&W Enterprises at 5 (reduced power limits would require the discontinuance of existing services).

<sup>46</sup> Lower 700 MHz Band base stations are required to comply with the same strict power flux density limits that apply to stations operating at power levels of 1 kW ERP or less. Lower 700 MHz Band Order, ¶ 104. The Commission found that any remaining interference risk “can be mitigated so as not to outweigh the added flexibility that is afforded by the higher power limit,” and no commenter shows otherwise. *Id.*

inefficiencies that would discourage investment and impede the deployment of new services for this spectrum.

The existing market-based policies also further the Commission’s longstanding policy that market-forces, rather than regulation, should “direct the course of development in CMRS and other markets.” The Commission adopted the flexible substantial service performance standard for the 700 MHz Band following its adoption of this standard for other spectrum bands.<sup>47</sup> The adoption of more burdensome regulation of 700 MHz Band spectrum as suggested by the Notice would not only frustrate the operation of market-based incentives for the development of this spectrum but also would fail to provide the “symmetrical regulatory framework for commercial mobile radio services” that is supported by longstanding Commission policy.<sup>48</sup>

**1. Flexible Secondary Market Policies Encourage the Efficient Usage of Spectrum and Should Not be Subject to Further Regulation**

Commenters make clear that the Commission’s existing secondary market policies are working effectively to stimulate more efficient spectrum usage by facilitating the leasing or transfer of spectrum to providers with higher value uses. CTIA (pp. 12-13) shows that over 950 additional cellular and broadband PCS licenses have been created as the result of the Commission’s partitioning and disaggregation policies, and that approximately 180 secondary market leasing arrangements have been accepted or granted since those leases were authorized

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<sup>47</sup> *1998 Biennial Regulatory Review Spectrum Aggregation Limits for Wireless Telecommunications Carriers*, WT Dkt. No. 98-205, Report and Order, 15 FCC Rcd. 9219, ¶ 22 (1999). *See also*, Cingular at 9-10; CTIA at 9.

<sup>48</sup> *Implementation of Sections 3(n) and 332 of the Communications Act*, Third Report and Order, GN Dkt. No. 93-252, 9 FCC Rcd. 7988, ¶ 23 (1994) (“Our first goal is to create a symmetrical regulatory framework for commercial radio services in order to foster economic growth and expanded service to consumers through competition.”). *See also*, Verizon Wireless at 8-9.

in early 2004. U.S. Cellular (p. 14) states that the secondary market “encourage[s] carriers to make unused spectrum available to others, on a permanent or temporary basis,” and Dobson (p. 10) emphasizes that “existing secondary markets initiatives provide interested parties adequate opportunities to enter the market.”<sup>49</sup> The Commission similarly has recognized that extensive partitioning has occurred, including in rural areas.<sup>50</sup> The secondary market policies thus provide a highly flexible market-based mechanism allowing licensees to tailor their service areas to meet their particular services and encouraging more intensive spectrum use. AT&T at 10-11.

These comments also demonstrate the burdensome, unnecessary and likely ineffective nature of the new regulation suggested by the Notice (¶ 71) under which licensees would be required to make “good faith” efforts to negotiate with potential spectrum lessees, or to establish contact with or communicate with all interested parties.<sup>51</sup> Aloha (pp. 12-13) states that the Commission should not “require private parties to negotiate spectrum usage agreements,” and Corr (p. 7) warns that Commission monitoring of these negotiations would more likely “stifle the flexibility of the parties involved rather than leading to any meaningful additional use.”<sup>52</sup> CTIA (p. 17) underscores that such an approach would merely impose additional costs and encourage administrative litigation, and Qualcomm (p. 20) similarly finds such requirements “unreasonably burdensome” and “likely to be fruitless.” As shown by these and other parties, any requirement that licensees engage in secondary market negotiations would likely cause unnecessary cost, delay and administrative litigation that would hamper the future

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<sup>49</sup> See also AT&T at 10-11; Cingular at 8; MetroPCS at 15.

<sup>50</sup> Rural Notice, ¶ 66 (2003) (“over 60 percent of all counties in the broadband PCS service have been partitioned at least once” and 72 percent of partitioned broadband PCS counties have “population density of 100 persons per square mile or less”).

<sup>51</sup> See, e.g., AT&T at 11; Corr at 7; CTIA at 17; U.S. Cellular at 16.

<sup>52</sup> See also Aloha at 12 (“Aloha . . . urges the Commission not to open what can only be a very

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negotiation of these arrangements and reduce the effectiveness of secondary market policies in stimulating further efficient spectrum usage. For these reasons, the burdens resulting from such regulation would far outweigh any resulting benefits.

## **2. Stricter Performance Requirements Would Impede Market Flexibility and Would Not Ensure Sustainable Rural Deployment**

The comments also demonstrate that the Commission should continue the present licensee performance requirements for this spectrum based on the existing “substantial service” standard. Both large and small carriers emphasize that the existing standard provides the necessary market-based incentives and flexibility to encourage sustainable deployment in rural areas, and that the adoption of the rigid performance standards described by the Notice (¶¶ 64-68) would lead to uneconomic build-out and limit investment and the development of new services.

AT&T and most other commenters emphasize that the additional flexibility afforded by performance standards requiring substantial service will assist the deployment of new advanced services using 700 MHz Band spectrum and urge the Commission to continue this approach.<sup>53</sup> The Commission has previously found that this flexible standard, rather than mandated build-out requirements, will encourage the development of “new and innovative” services to optimize

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complex can of worms that offers no material public interest benefit”).

<sup>53</sup> *See, e.g.*, AT&T at 12-14; Dobson at 5 (substantial service provides flexibility to accommodate the “new and innovative services” in the 700 MHz Band); Leap at 9 (endorsing the Commission’s findings that its existing market-oriented substantial service approach with the existing safe harbors will best ensure deployment); MetroPCS at 15 (the greater flexibility of the substantial service standard allows licensees to address “variances in the competitive landscape, population density and other important demographics”). *See also*, Milkyway at 8 (“no changes should be made”).

usage of this spectrum.<sup>54</sup> The Commission has further recognized that this flexible performance standard also encourages the provision of service in rural areas, by allowing “rural-focused business plans” and deployment “in more sparsely populated areas,” and by avoiding the constrictions of “more concrete population or coverage requirements.”<sup>55</sup> Most commenters endorse the benefits of the flexible substantial service standard as shown by these prior Commission findings and make clear that more rigid performance requirements would impede the development of new services for this spectrum by distorting the marketplace and deterring investment without promoting sustainable deployment in rural areas.<sup>56</sup>

Regardless of FCC performance requirements, as highlighted by AT&T (p. 13) and other parties, operators acquiring spectrum through the FCC auctions process already have strong economic incentives to deploy services to every potential customer that may be served on a viable basis.<sup>57</sup> For example, Dobson states (p. 8) that “[m]arketplace forces, and not regulation, are [] driving Dobson and other carriers to extend coverage and introduce innovative services to

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<sup>54</sup> See Upper 700 MHz Band Order, ¶ 70 (the substantial service standard provides “flexibility to offer the full range of services under the allocations table and accommodate new and innovative technologies”); Lower 700 MHz Band Order, ¶ 150 (the substantial standard “provides the flexibility required to accommodate the new and innovative services that are permitted by the Lower 700 MHz Band’s reallocation.”). See also, e.g., *Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands*, Report and Order, 18 FCC Rcd. 25162, ¶ 75 (2003) (“AWS Order”) (the substantial service standard “will provide licensees greater flexibility to implement their business plans” and “provides the flexibility required to accommodate the new and innovative services that we believe will be forthcoming in these bands”).

<sup>55</sup> Rural Report and Order, ¶ 76.

<sup>56</sup> See, e.g., Aloha at 9; Blooston at 6; Cingular at 9-13; CTIA at 8-16;; Union at 5; U.S. Cellular at 14-16; Verizon Wireless at 6-8.

<sup>57</sup> See CTIA at 8 (urging “the Commission to consider whether the already existing strong market incentives obviate the need for any performance requirements.”); Qualcomm at 3 (operators have “strong financial and market incentives to launch wireless services to the broadest possible footprint”); MetroPCS at 15 (licensees have “substantial economic incentive to put the spectrum to beneficial uses”); U.S. Cellular at 13 (“Incumbent carriers want to and will construct base stations anywhere such cells make economic sense.”).

rural areas wherever it is economically feasible to do so.” At the same time, as recognized by the Commission and a number of commenters, less populated areas generally cannot sustain the same level of service as more highly populated areas.<sup>58</sup> The comments thus demonstrate that, in furtherance of its market-based policies, the Commission should continue to apply the existing substantial service standard to this spectrum allowing operators greater flexibility to deploy services in accordance with business plans and market demands.

The comments also underscore the likely adverse consequences of stricter performance standards in encouraging uneconomic construction, imposing legal and administrative costs, discouraging industry investment and reducing secondary market leasing opportunities.<sup>59</sup> The use of population-based construction benchmarks would discourage investment in rural areas and encourage multiple operators to serve the same heavily-populated areas, rather than developing service in other areas.<sup>60</sup> Performance standards based on “keep what you use,” as noted by AT&T (p. 14), CTIA (p. 14) and other commenters, would lead to inefficient deployments based on older technologies, raise costs and prices and harm investment in the wireless industry. The adoption of “keep what you use” forfeiture requirements for used spectrum also would impede Commission secondary market policies, by encouraging new

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<sup>58</sup> See, e.g., Rural Report and Order, ¶14; Corr at 5 (a policy of reliance on market forces both “avoid[s] artificial build-outs in areas that cannot economically sustain service and also ensure[s] the fastest possible build-out where economics so dictate”); Blooston at 6 (geographic coverage benchmarks “can be impossible to meet in regions featuring pockets of inhabitants surrounded by large areas with population densities below twenty persons per square mile”).

<sup>59</sup> AT&T at 14-15; Dobson at 6-10 (“given the substantial competitive forces at play in the industry, any ‘keep what you use’ approach is likely to compel carriers to devote resources inefficiently to unpopulated or sparsely populated areas solely to preserve future expansion opportunities”); U.S. Cellular at 15 (“requiring 700 MHz licensees to meet difficult population or geographic coverage requirements in order to keep their licenses would be contrary to sound economic principles”); MetroPCS at 15-16 (warning that strict coverage requirements would prejudice new entrants).

entrants to obtain spectrum through re-licensing rather than negotiating secondary market agreements.<sup>61</sup> As Dobson (p. 10) predicts, protracted regulatory proceedings will likely be required to define coverage standards in light of the different technologies likely to be used for this spectrum.<sup>62</sup>

As noted by AT&T (p. 14), the Commission has previously acknowledged many of these “potentially detrimental” results of a “keep what you use” performance standard.<sup>63</sup> Commenters also properly note that the very different competitive circumstances under which these policies were applied to cellular service in the 1980’s provides no support for the use of these policies in today’s highly competitive wireless and broadband markets.<sup>64</sup> To avoid the adverse consequences of such regulation, and to provide market-based incentives for optimal usage of 700 MHz Band spectrum, the Commission should continue to promote the deployment of advanced services for this spectrum by using the same flexible substantial service performance standard that applies to other Part 27 services.

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<sup>60</sup> AT&T at 14; CTIA at 10.

<sup>61</sup> *See* AT&T at 15; Cingular at 13.

<sup>62</sup> The Commission has previously acknowledged the potential difficulty of defining “use” for this purpose. Rural Report and Order, ¶ 156, n.470. *See* AT&T at 15, n.39. Similarly, the extensive regulation proposed by some other commenters is more likely to encourage administrative litigation than efficient spectrum usage and investment. *See, e.g.*, D. Howard & F. Javed at 24-26; OPASTCO at 5.

<sup>63</sup> Rural Report and Order, ¶ 153. *See also*, AT&T at 14.

<sup>64</sup> CTIA at 15; Dobson at 8.

### **3. A Strong Renewal Expectancy is Required**

As urged by AT&T (p. 15), the Commission should continue the existing renewal expectancies for licensees based on the provision of substantial service.<sup>65</sup> AT&T agrees with the commenters emphasizing that 700 MHz licenses should receive the same strong renewal expectancy as other Part 27 licensees, including licensees of AWS spectrum, which the Commission determined “should have the right to the same renewal expectancy as other Part 27 licensees.”<sup>66</sup> The continuation of this existing renewal expectancy based on the Part 27 substantial service performance standard will promote investment and the development of new services, as the Commission found with respect to AWS spectrum, and the same concerns are of equal importance here.<sup>67</sup> The continuation of same renewal expectation as other Part 27 licensees will also provide regularity parity for 700 MHz licensees in accordance with longstanding Commission policies.<sup>68</sup>

### **4. The Commission Should Establish 15-Year License Terms**

A number of commenters urge the Commission to license 700 MHz spectrum based on 15-year initial license terms similar to those adopted for AWS licenses to provide additional regulatory stability in order to stimulate investment and the development of new services using this spectrum.<sup>69</sup> The Commission determined that initial license terms of 15 years, followed by

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<sup>65</sup> 47 C.F.R. Sect. 27.14.

<sup>66</sup> AWS Order, ¶ 71. *See also*, e.g., CTIA at 18; Dobson at 10; U.S. Cellular at 17; MetroPCS at 16.

<sup>67</sup> AWS Order, ¶ 71. *See also*, MetroPCS at 16 (“lenders routinely focus on the nature and extent of a licensee’s ‘renewal expectancy’”); Qualcomm at 20 (“an existing licensee having invested significantly in developing a system should be entitled to a renewal expectancy”).

<sup>68</sup> *Implementation of Sections 3(n) and 332 of the Communications Act*, Third Report and Order, GN Docket No. 93-252, 9 FCC Rcd. 7988, ¶ 23 (1994).

<sup>69</sup> AT&T at 15-16; CTIA at 20; MetroPCS at 18 (opining that “this extended term was one of the factors that led to the successful AWS auction”); Aloha at 11; C&W Enterprises at 4; Frontier at

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10-year renewal terms, would promote the development and deployment of advanced wireless networks over AWS spectrum by providing investors “necessary assurances that a sufficient amount of time would be available to recoup the initial costs of developing and deploying advanced wireless networks in these bands.”<sup>70</sup> The Commission similarly should establish 15-year initial license terms to increase incentives for investment in next generation networks, services and applications for 700 MHz spectrum.

**V. THE COMMISSION SHOULD APPLY 911/ENHANCED 911 AND HEARING AID COMPATIBILITY RULES**

There is wide support for the application of 911/E911 requirements to 700 MHz spectrum licensees meeting the requirements for such treatment under Section 20.18(a) and the *E911 Scope Order*, including the provision of two-way voice services interconnected to the public switched network on either a stand-alone basis or packaged with other telecommunications services.<sup>71</sup> Commenters also strongly support the application of hearing aid-compatibility requirements to 700 MHz spectrum licensees meeting the requirements for such treatment under the Hearing Aid Compatibility Act “to the extent they offer real time, two-way switched voice service that is interconnected to the public switched telephone network, and utilize an in-network switching facility which enables the provider to reuse frequencies and accomplish seamless

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9; Navaho Nation at 3. *See also*, 47 C.F.R. Sect. 27.13(g).

<sup>70</sup> AWS Order, ¶ 70.

<sup>71</sup> See 47 C.F.R. Sect. 20.18; *Revision of the Commission’s Rules to Ensure Compatibility With Enhanced 911 Emergency Calling Systems, Amendment of Parts 2 and 25 to Implement the Global Mobile Personal Communications by Satellite (GMPCS) Memorandum of Understanding and Arrangements; Petition of the National Telecommunications and Information Administration to Amend Part 25 of the Commission’s Rules to Establish Emissions Limits for Mobile and Portable Earth Stations Operating in the 1610-1660.5 MHz Band*, CC Docket No. 94-102, *Report and Order and Second Further Notice of Proposed Rulemaking*, 18 FCC Rcd. 25340, ¶ 118 (2003).

handoffs of subscriber calls.”<sup>72</sup> The Commission therefore should apply these requirements consistent with its tentative conclusion in the Notice (¶ 99).

### **CONCLUSION**

For the reasons set forth above and in AT&T’s comments, the Commission should continue its existing market-based approach to encourage the highest valued uses of 700 MHz Band spectrum. In particular, the Commission should license unauctioned 700 MHz Band spectrum based on the existing EAG service areas that it has found are the most efficient geographic areas to optimize the benefits of next generation services through commercial use of this spectrum. To encourage the development and deployment of new services using this spectrum, the Commission also should continue its other market-based rules and policies, and should not mandate secondary market negotiations or establish stricter performance standards.

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<sup>72</sup> *Section 68.4(a) of the Commission’s Rules Governing Hearing Aid-Compatible Telephones*, WT Docket No. 01-309, *Report and Order*, 18 FCC Rcd.16753, ¶ 26 (2003).

The Commission also should license this spectrum for initial terms of 15 years with strong renewal expectancies based on existing substantial service standards. In addition, the Commission should apply 911/E911 and hearing aid-compatibility requirements to 700 MHz Band licensees meeting the relevant criteria for such treatment, including the provision of two-way voice services interconnected to the public switched network.

Respectfully submitted,

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## CERTIFICATE OF SERVICE

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