

**Before the  
Federal Communications Commission  
Washington, DC 20554**

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In the Matter of	)	
	)	
Revisions to Rules Authorizing the Operation of Low Power Auxiliary Stations in the 698-806 MHz Band	)	WT Docket No. 08-166
	)	
Public Interest Spectrum Coalition, Petition for Rulemaking Regarding Low Power Auxiliary Stations, Including Wireless Microphones, and the Digital Television Transition	)	WT Docket No. 08-167
	)	

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**COMMENTS OF METROPCS COMMUNICATIONS, INC.**

MetroPCS Communications, Inc. (“MetroPCS”)<sup>1</sup>, by its attorneys, respectfully submits these comments in response to the *Notice of Proposed Rulemaking*<sup>2</sup> (“NPRM”), released August 21, 2008 in the above captioned proceedings. The following is respectfully shown:

**I. INTRODUCTION**

MetroPCS is among the fastest growing facilities-based wireless telecommunications carriers in the United States and as of June 30, 2008, provided wireless broadband personal communications services (“PCS”) to approximately 4.6 million subscribers in a number of major

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<sup>1</sup> For purposes of these Comments, the term “MetroPCS” refers to MetroPCS Communications, Inc. and off of its FCC-licensed subsidiaries.

<sup>2</sup> See *In the Matter of Revision to Rules Authorizing the Operation of Low Power Auxiliary Stations in the 698-806 MHz Bands, Public Interest Spectrum Coalition, Petition for Rulemaking Regarding Low Power Auxiliary Stations, Including Wireless Microphones, and the Digital Television Transition*, Notice of Proposed Rulemaking and Order, FCC 08-188 (Rel. August 21, 2008), 73 Fed. Reg. 51406, (September 3, 2008).

metropolitan areas throughout the United States. MetroPCS targets a mass market which often goes unserved by the national wireless carriers. MetroPCS offers wireless voice and data services on a no long-term contract, flat rate, unlimited usage basis, with service plans beginning as low as \$30/month. MetroPCS 700 MHz, LLC, a wholly-owned subsidiary of MetroPCS, was an active participant in Auction 73, the recently concluded auction of 700 MHz spectrum, and was the fifth highest bidder in terms of gross bids placed by spending approximately \$313.2 million.<sup>3</sup> MetroPCS also is actively participating in the proceeding addressing the AWS-2 and AWS-3 spectrum.<sup>4</sup> Thus, as a successful licensee of 700 MHz spectrum and as a commenter and potential interested bidder in the AWS-2 and AWS-3 bands, MetroPCS has a substantial interest in the outcome of this proceeding.

## **II. THE COMMISSION SHOULD PROHIBIT THE OPERATION OF LOW POWER AUXILIARY STATIONS WITHIN THE 700 MHZ BAND**

MetroPCS agrees with the Commission's tentative conclusion to revise its rules to "make clear that low power auxiliary stations authorized under Part 74 of [its] rules – including wireless microphones – will not be permitted to operate in the 700 MHz Band after the DTV transition."<sup>5</sup> As a 700 MHz licensee, MetroPCS shares the Commission's concern that such a use has "the potential for harmful interference from low power auxiliary devices to 700 MHz Band public

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<sup>3</sup> See Ric Prentiss, *March Megahertz Madness: Filling in the A73 brackets*, Raymond James, March 24, 2008. MetroPCS was the high bidder on BEA-003 Boston-Worcester- MA-NH-RI-VT.

<sup>4</sup> *Service Rules for Advanced Wireless Service in the 2155-2175 MHz Band*, WT Docket No. 07-195, *Service Rules for Advanced Wireless Services in the 1915-1920 MHz, 1995-2000 MHz, 2020-2025 MHz and 2175-2180 MHz Bands*, WT Docket No. 04-356, (Rel. June 20, 2008), 73 Fed. Reg. 35995 (June 25, 2008).

<sup>5</sup> *NPRM* at para. 14.

safety and commercial wireless operations.”<sup>6</sup> Any potential harmful interference could interrupt the innovative wireless broadband services that 700 MHz licensees will be providing to the public. Since 700 MHz handsets will operate with very low power levels, proximate low power auxiliary stations could interfere with the reception of wireless handsets, or the ability of wireless base stations to receive wireless handset signals, all of which could cause dropped calls and degradation of call quality. In addition, allowing low power auxiliary stations to operate in the 700 MHz spectrum recently sold at auction would unnecessarily and unfairly frustrate the expectations of 700 MHz bidders that the spectrum would be free and clear of interfering uses once the digital transition had occurred. Since the Commission already has licensed the 700 MHz spectrum, the public interest would not be served by allowing low power auxiliary stations to interfere with that use.

Further, there is no need to allow low power auxiliary stations to operate in this band. There is a “ready availability” of other alternatives that potential licensees have under the Commission’s rules to obtain “access to various other spectrum frequencies in which to operate low power auxiliary stations.”<sup>7</sup> For example, there is over 300 MHz of unlicensed spectrum where these low power auxiliary stations could operate without causing harm to already licensed commercial services. Thus, the Commission should adopt its tentative conclusions as set forth in the *NPRM*.

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<sup>6</sup> *Id.*

<sup>7</sup> *Id.* at para. 16. Indeed, the Commission notes that “[l]ow power auxiliary stations are also authorized for use in over 300 megahertz of spectrum in 11 other frequency bands ranging from 26 MHz to 950 MHz.” *Id.* at para. 16, ft. nt. 51.

### III. THE PUBLIC INTEREST WOULD NOT BE SERVED BY A GENERAL WIRELESS MICROPHONE SERVICE IN THE 2020-2025 MHz BLOCK

MetroPCS understands that some commenters in the so-called “White Spaces” proceeding<sup>8</sup> have expressed concern about potential interference to digital television from the widespread use of unauthorized wireless microphones. Nonetheless, even if the Commission sees some potential merit in establishing a General Wireless Microphone Service, (“GWMS”), the Commission should not take valuable paired AWS-J block commercial spectrum and dedicate it to a General Wireless Microphone Service. Reallocating this 5 MHz block in this fashion would not be in the public interest because of the critical need to retain the 5 MHz in a paired spectrum configuration as part of the AWS-2 J Block allocation.

MetroPCS has been a major winner in past auctions of Advanced Wireless Service (AWS) and 700 MHz spectrum,<sup>9</sup> and an active participant in ongoing proceedings pertaining to the AWS-2 and AWS-3 allocation. As MetroPCS previously has demonstrated to the Commission, there continues to be a substantial, unsatisfied need for paired CMRS spectrum in the wireless telephone industry.<sup>10</sup> This need is particularly acute amongst rural, regional and mid-tier carriers, which have been an extremely positive competitive influence in the wireless marketplace, but were largely foreclosed from obtaining additional spectrum in the most recent 700 MHz auction. The continuing need on the part of these carriers for paired spectrum is

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<sup>8</sup> FCC Docket Nos. 04-186 and 02-380.

<sup>9</sup> See e.g., “FCC Advanced Wireless Service Auction No. 66 \*\*\*FINAL\*\*\*, available at [http://wireless.fcc.gov/auctions/66/charts/66press\\_3.pdf](http://wireless.fcc.gov/auctions/66/charts/66press_3.pdf); “FCC 700 MHz Band Auction, Attachment A, Winning Bids, available at [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DA-08-595A2.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-08-595A2.pdf).

<sup>10</sup> See Comments of MetroPCS in *Service Rules for Advanced Wireless Service in the 2155-2175 MHz Band*, WT Docket No. 07-195, *Service Rules for Advanced Wireless Services in the 1915-1920 MHz, 1995-2000 MHz, 2020-2025 MHz and 2175-2180 MHz Bands*, WT Docket No. 04-356, (filed July 25, 2008). (“MetroPCS Comments”).

evident by the robust bidding for the Lower Band 700 MHz paired spectrum in the recently completed Auction 73. Using the significantly higher prices per MHz/POP that were paid for the lower Band paired 700 MHz commercial channels in Auction 73 as a guide, it is clear that the market is putting a higher value on paired spectrum that is made available in relatively small spectrum blocks and geographic areas.<sup>11</sup> Further, given the relatively higher per MHz/POP values that were paid for paired versus unpaired spectrum, the market clearly values paired spectrum over unpaired spectrum.<sup>12</sup>

Given the intense need for paired spectrum for the many active rural, small and regional mid-tier wireless bidders, many of whom came away from the 700 MHz auction empty handed, it simply would not be in the public interest for the Commission to reallocate the 2020-2025 MHz block for a GWMS, especially in light of the enormous amount of spectrum that already is available for unlicensed use and provides a suitable alternative. Should the Commission wish to create a GWMS, it should look instead to other spectrum. The demonstrated need for paired spectrum would be completely undermined by decoupling the 5 MHz at issue; destroying the paired J Block would remove much needed AWS spectrum from beneficial use.

For example, as noted above, the Commission already has recognized that “[l]ow power auxiliary stations also are authorized for use in over 300 megahertz of spectrum in 11 other frequency bands ranging from 26 MHz to 950 MHz.”<sup>13</sup> This point recently was echoed by commenters in the “White Spaces” proceeding, who submitted a report that estimated that more

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<sup>11</sup> MetroPCS Comments at 4-5.

<sup>12</sup> The average per MHz/POP bids for 700 MHz E Block were \$0.74/MHz/POP while the 700 MHz A Block (the lower of the two lower 700 MHz blocks) was \$1.13/MHz/POP. See Ric Prentiss, *March Megahertz Madness: Filling in the A73 brackets*, Raymond James, March 24, 2008.

<sup>13</sup> See note 7, *supra*.

than 10 percent of the entire spectrum below 100 GHz already has been allocated for unlicensed use.<sup>14</sup> The report also concluded that “the supply of unlicensed spectrum is large not just in absolute terms but by comparison to that of liberally licensed spectrum.”<sup>15</sup> Thus, there appears to be great capability within the existing universe of unlicensed spectrum for the Commission to allocate the proposed GWMS, if such specific allocation is even necessary. Indeed, it is informative that the petition at issue was filed by the PISC and not wireless microphone manufacturers who one would expect would be leading the charge if there were no other current suitable alternatives. Similarly stated, if an additional spectrum allocation was actually necessary the manufacturers of such equipment would be spearheading this request.

Further, PISC does not make any showing why the 2020-2025 MHz spectrum would be particularly well suited for GWMS. Indeed, given that the spectrum is adjacent to already licensed AWS services, the microphone receivers would be prone to interference from wireless handsets operating in close proximity to the wireless receivers. Since the wireless microphone users have demonstrated that they cannot afford to have interference, allocating them spectrum adjacent to a band which may have hundreds of millions of mobile users, and that will most likely have users in close proximity to the wireless microphone receivers, would also not serve the public interest. Ironically, if GWMS is placed in the 2020-2025 MHz band, it will enjoy less interference protection than it enjoys in the unlicensed bands. In the unlicensed bands, other unlicensed devices must ensure that they do not interfere with other users of the band. In contrast, since AWS handsets would be operating lawfully in their licensed spectrum, they would

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<sup>14</sup> See *Notice of Ex Parte Presentation Regarding Docket No. ET 04-186 & 02-380* by Qualcomm Inc., September 18, 2008. (As part of its *ex parte* presentation, Qualcomm presented a copy of report prepared by Charles L. Jackson, Dorothy Robyn and Coleman Bazelon entitled “Unlicensed Use of the TV White Spaces: Wasteful and Harmful.”)

not be obligated to sense and protect nearby wireless microphones, and wireless microphones would have to accept any resulting interference. If the Commission believes that it must allocate spectrum for GWMS, there are better places to put this service rather than right next to an existing service that inevitably would interfere with it.

Because (1) the PISC proposal does not specifically require the proposed GWMS to be constituted from the 2020-2025 MHz spectrum,<sup>16</sup> (2) significant harm to the public interest would result from removing spectrum from the upcoming AWS auction, and (3) the Commission has numerous other options available to adequately accommodate authorized wireless microphone users without taking the radical and completely unnecessary step of designating the 2020-2025 MHz band for such a proposal, MetroPCS respectfully urges the Commission to refrain from decoupling and reallocating the 2020-2025 MHz band should the Commission ultimately decide to create a General Wireless Microphone Service.

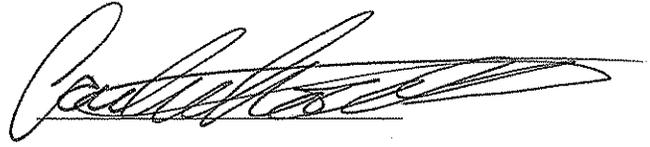
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(...continued)

<sup>15</sup> *Id.*

<sup>16</sup> Compliant of Public Interest Spectrum Coalition (PISC) Against Shure, Inc. Nady Systems, Inc., VocoPro, Audio2000, Sennheiser Electronic Corporation, Audix Microphones, Electro Voice, Hisonic International, Inc., Pyle Audio, *et al.*; Petition to Create a General Wireless Microphone Service (GWMS), *Informal Complaint and Petition for Rulemaking*, (filed July 16, 2008) at 33 (PISC notes that the 2020-2025 MHz Spectrum was one possibility for housing its proposed GWMS *if* the Commission adopts the proposed rules in the AWS-2/AWS-3 proceeding (emphasis added)).

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Carl W. Northrop", written over a horizontal line.

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