

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
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)	
Service Rules for Advanced Wireless Services in the 2155-2175 MHz Band)	WT Docket No. 07-195
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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
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COMMENTS OF METROPCS COMMUNICATIONS, INC.

Carl W. Northrop
Michael Lazarus
Paul, Hastings, Janofsky & Walker LLP
875 15th Street, NW
Washington, DC 20005
Telephone: (202) 551-1700
Facsimile: (202) 551-1705

Mark A. Stachiw
Executive Vice President, General Counsel
& Secretary
2250 Lakeside Boulevard
Richardson, TX 75082
Telephone: (214) 570-5800
Facsimile: (866) 685-9618

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SUMMARY

The Commission faces an important policy decision as it finalizes the AWS-2 and AWS-3 spectrum allocations that will have a wide-reaching impact on competition in the wireless marketplace. Specifically, the Commission's choice is either to (1) allocate spectrum in a manner that allows marketplace forces to ensure that scarce spectrum is put to its highest and best use, as it has done with great success in the past, or (2) follow the same path as it did with the 700 MHz D Block, by dedicating a valuable block of spectrum to a "designer allocation" specifically tailored to the business plan of a single potential bidder while, at the same time, destroying a paired broadband channel desperately needed by smaller and mid-tier carriers which are trying to provide competition to existing wireless services.

The proposed rules set forth in the *Further Notice of Proposed Rule Making* ("FNPRM") mistakenly head the Commission toward Door No. 2. MetroPCS has substantial concerns about the proposed allocation, which includes a mandate for supposedly "free" wireless broadband service subject to a series of ill-conceived and ambiguous government-imposed restrictions. The public interest demands, and MetroPCS prefers, an allocation that maximizes the number of paired channels available for wireless services. If, however, the Commission insists upon creating a large unpaired AWS-3 block, MetroPCS urges that it occupy at most only 20 MHz of spectrum – and not destroy the 10 MHz J Block (5 MHz paired with 5 MHz) AWS-2 channel by reassigning 2175-2180 MHz to AWS-3.

The Commission has failed to provide an adequate justification or to generate record support for combining the 2155-2175 MHz AWS-3 spectrum with the 2175-2180 MHz portion of the AWS-2 J Block. This proposed reassignment of AWS-2 spectrum is not in the public interest, because it would preclude wireless carriers, particularly rural, regional and mid-tier carriers, from any meaningful opportunity to acquire spectrum in the AWS-2 and AWS-3 bands

for the provision of mobile wireless services competitive with other well-heeled national competitors. Notably, the results of Auction 73 clearly demonstrate that rural, regional and mid-tier carriers have a substantial need for paired spectrum that remains unfulfilled.

Further, the proposed use of AWS-3 has not been tested to ensure that destructive interference will not be caused to existing AWS-1 licensees. Indeed, the Commission has conducted no testing, which is all the more remarkable considering the substantial interference concerns raised by AWS-1 incumbent licensees with regard to proposed mobile operations in the AWS-3 band. Moreover, there has been no meaningful testing to determine whether, and if so, to what extent, taking the 5 MHz of the J Block would mitigate interference to AWS-1 operators. The Commission has a statutory mandate to avoid harmful interference and should not proceed with an inadequately-tested allocation in the face of substantial record evidence that interference is likely to occur.

The Commission also should not risk having valuable AWS spectrum lie fallow because the Commission guessed incorrectly on the viability of the services it is mandating. Further, there are serious legal concerns regarding the authority of the Commission to impose in its proposed rules either the “free” service mandate or the content filtering requirements. For example, notwithstanding M2Z Networks Inc.’s (“M2Z’s”) claims to the contrary, the Commission does not have the authority to regulate the rates – *i.e.*, by setting a rate at “\$0” - for wireless broadband Internet service. And, the vague, “always-on” content filtering mechanism that the Commission proposes does not appear to pass constitutional muster. Consequently, if the Commission proceeds with its proposed rules and allocation, there will almost certainly be legal challenges to the entire AWS-3 allocation. This will place a substantial legal cloud over, and perhaps halt, the auction, reduce the number of participants in the auction, and delay, if not completely undermine, the public benefits that the Commission is trying to promote (*e.g.*, new,

effective competition in the broadband market). There are better alternatives that the Commission should consider if it determines that a truly free wireless broadband service is desirable or if it determines that there are too few competing broadband pipes to the home. Simply put, this designer allocation is not a panacea and provides false hope as a cure for the perceived lack of competitiveness in the broadband market.

Moreover, the proposed AWS-3 allocation is based upon the business plan of M2Z, a private entity and interested party that has pushed for this particular allocation plan for nearly two years at the Commission and before Congress. But, the Commission should have learned from the recent auction of the 700 MHz D Block that basing a spectrum allocation on the desires of a single potential bidder creates an enormous risk. If the government-endorsed business model turns out not to be viable, the auction either will not be robust or will fail. “If we build it, they will come” may make a good movie line, but it is not good spectrum allocation policy. The FCC should not revert to discredited command-and-control allocation policies which put the government in the business of picking winners and losers. Rather, the Commission should make multiple, fungible channels available with flexible rules and minimal restrictions, and let the marketplace decide the best and highest use for the spectrum.

If the Commission insists on proceeding with a (dubiously) “free” wireless broadband service, the rules must ensure that any winning bidder will actually perform so that the public gets the expected benefit of the bargain. This would require additional specifications on the terms and conditions of the service, as well as safeguards - - such as a substantial reserve price and a letter of credit or performance bond requirement - - in order to make sure that the winning bidder has the financial, operational, and technical wherewithal to perform and will actually provide the services that the Commission has found to justify the allocation.

Lastly, MetroPCS submits that the proposed rules for the H Block are generally well-crafted and will, with a few suggested refinements, promote competition in the wireless industry. Further, the Commission should establish service rules for the J Block that mirror those proposed by the Commission for the H Block (including the proposed revisions by MetroPCS), and take steps to auction off at the same time both the paired H and J Blocks as soon as possible.

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COMMENTS OF METROPCS COMMUNICATIONS, INC.

MetroPCS Communications, Inc. (“MetroPCS”),¹ by its attorneys, hereby respectfully submits its comments in response to the *Further Notice of Proposed Rulemaking*, FCC 08-158, released June 20, 2008 (the “*FNPRM*”)² in the above-captioned proceedings. The following is respectfully shown:

¹ For purposes of these Comments, the term “MetroPCS” refers to MetroPCS Communications, Inc. and all of its FCC-licensed subsidiaries.

² See *Service Rules for Advanced Wireless Services in the 2155-2175 MHz Band, Service Rules for Advanced Wireless Services in the 1915-1920 MHz, 1995-2000 MHz, 2020-2025 MHz and 2175-2180 MHz Bands*, Further Notice of Proposed Rule Making, FCC 08-158 (rel. June 20, 2008), 73 Fed. Reg. 35995 (June 25, 2008).

I. THE COMMISSION SHOULD NOT REASSIGN THE 2175-2180 MHZ SPECTRUM TO THE AWS-3 ALLOCATION

The Commission proposes to “. . . [c]ombine the 2155-2175 MHz band with the 2175-2180 MHz band in order to create a 25 megahertz block of spectrum.”³ The Commission’s sole rationale in its *FNPRM* for this radical reassignment of spectrum,⁴ and for the creation of a “designer allocation”⁵ is that “. . . combining the 2155-2175 MHz band with the 2175-2180 MHz band *may* allow an AWS-3 licensee to make more robust use of this spectrum block while meeting a stricter OOB [out-of-band emission] limit than traditionally applied in bands designated for flexible use, such as the AWS-1 and 700 MHz bands.”⁶ This is the only statement in the entire *FNPRM* explaining this drastically-altered approach; an approach that was not referenced in the previous rule makings for either the AWS-2 or AWS-3 allocations, not advocated by any commenter prior to the indication in press reports that this was under consideration, not apparently supported by any empirical data or test results, and not certain to accomplish the stated goal of reducing destructive interference.

Thus, the Commission provides no justification or support for this proposed reassignment. The Commission should not toss away valuable paired spectrum - - the 2175-2180 MHz part of the J Block - - without a well-articulated rationale, public policy goal and substantial record evidence that such change accomplishes the stated purpose. Accordingly,

³ *FNPRM*, at para. 3.

⁴ The reassignment is “radical” because it would destroy one of the two paired channel blocks in AWS-2, and would render the orphaned 2020-2025 MHz block virtually useless.

⁵ By “designer allocation,” MetroPCS means to convey that the allocation proposed in the *FNPRM* has been customized to suit one particular proponent - - in this case, M2Z Networks, Inc. (“M2Z”) - - and that proponent’s operational and business plan, but does so in a manner that may deter other potential bidders from participating in the auction for the spectrum that is burdened by that customization.

⁶ *FNPRM*, at para. 5 (emphasis added).

MetroPCS urges the Commission not to reassign the 5 MHz of AWS-2 spectrum, because (1) the 5 MHz desperately needs to be retained in a paired configuration in order to foster increased competition in the wireless industry, and a combination with the AWS-3 spectrum is not in the public interest; (2) this new allocation and the proposed use of the 2155-2180 MHz band have not been shown to lessen or to prevent harmful interference to incumbent spectrum licensees in the AWS-1 band; and (3) the Commission has not considered other, less drastic, steps to reach its ultimate objective.

A. Removing 5 MHz of Spectrum from the “J” Block is Not in the Public Interest

MetroPCS opposes breaking up the paired AWS-2 J Block. Rural, regional and mid-tier carriers, which have been an extremely positive competitive influence in the wireless marketplace, have critical unmet needs for additional paired spectrum resources in order to meet substantial existing and future market demands. The continuing need on the part of these carriers for spectrum was resoundingly affirmed by the robust bidding for the Lower Band 700 MHz paired spectrum in the recently completed Auction 73. Unfortunately, many active rural, small, and regional mid-tier wireless bidders, as well as many new entrants, came up empty-handed, due to the relatively small number of channels that were suited to their business plans and the large spectrum appetites and financial wherewithal of certain large auction participants.⁷ Under these circumstances, removing 5 MHz of spectrum from the J Block, and thus eliminating a sorely-needed paired channel block, would inhibit competition in the wireless industry, and would not be in the public interest.

⁷ Although all of the mid-tiered carriers were qualified to bid, several major regional wireless carriers, such as Alltel Wireless and Leap Wireless, were completely shut out of the auction. And, others, such as MetroPCS and perhaps US Cellular, were able to acquire considerably less spectrum than they would have liked in the 700 MHz auction. MetroPCS wonders whether the failure of Alltel to secure needed spectrum has led to consolidation of Alltel into Verizon, a development which further lessens competition in the wireless industry.

The substantial demonstrated need for additional paired broadband spectrum in the wireless marketplace can be addressed in part by an auction that includes a paired H Block and a paired J Block. The public interest is best served when auctions include multiple unencumbered blocks of fungible spectrum with flexible service rules. However, the spectrum configuration and market sizes in Auction 73, with large spectrum blocks and combinatorial bidding, acted to squeeze out smaller and regional carriers.⁸ Ultimately, AT&T and Verizon Wireless purchased approximately \$16 billion of the nearly \$19 billion of acquired spectrum, leaving only approximately \$3 billion for all other carriers combined.

The substantial unsatisfied need for paired CMRS spectrum on the part of the regional, mid-tier and rural carriers is exacerbated by the continued consolidation in the wireless industry, which makes it less and less likely that a potential entrant or mid-tier carrier will be able to buy spectrum in a private sale.⁹ Any proposed Commission plan that would remove unrestricted paired spectrum from the AWS-2 allocation would significantly compromise the Commission's efforts to foster competition in a wireless industry that is becoming increasingly represented by a small number of major national service providers.

Using Auction 73 as a guide, the market is putting a high value on paired spectrum that is made available in relatively small spectrum blocks and geographic areas (this conclusion is based upon the significantly higher prices per MHz/POP that were paid for the Lower Band paired 700 MHz commercial channels in Auction 73), and not as high a value upon spectrum

⁸ See MetroPCS *Ex Parte*, WT Docket Nos. 06-150, 06-164, PS Docket No. 06-229, and AU Docket No. 07-157, filed April 7, 2008.

⁹ Historically, large incumbent carriers have been disinclined to divest spectrum absent a spectrum cap or spectrum aggregation requirement obligating them to do so. Further, as the numbers of carriers in the market continues to fall, the number of mergers - - and thus the number of required divestitures - - will dwindle, which will further diminish any possibility that spectrum will be available on the open market.

blocks of 20 MHz or more that are geared to nationwide use (this conclusion is based upon the relatively small number of bidders and lower per MHz/POP prices paid for the Upper Band C Block in Auction 73). Indeed, the difference in prices per MHz/POP for the A and B Blocks versus the C block in Auction 73 is staggering. For the C Block, the average price was \$0.76 per MHz/POP.¹⁰ For the A Block, the average price was \$1.16 per MHz/POP, and for the B Block, the average price was a staggering \$2.68 per MHz/POP.¹¹ These prices clearly demonstrate the substantial demand for additional paired spectrum in small geographic areas by rural, regional and mid-tier carriers, as well as new entrants.

These demonstrated needs should not go unmet in order to accommodate an untested designer spectrum allocation which might allow one particular entity to garner nationwide commercial spectrum for itself at a bargain basement price.¹² The proposed Commission plan would destroy the J Block and thereby sacrifice 50% of the paired spectrum in the originally proposed AWS-2 allocation without any evidence in the record that the public interest would be served by such an outcome. And, as previously noted, reducing the AWS-2 allocation to a single paired frequency block would significantly compromise the Commission's efforts to foster competition in a wireless industry becoming increasingly represented by a small number of major national service providers.

In addition, there is no mention in the *FNPRM* of the proposed fate of the other half of the J Block. The Commission's plan to subdivide the J Block apparently would leave an

¹⁰ "It's Over: 700 MHz Auction Ends After 38 Days, 261 Rounds," RCRNews.com, Dan Meyer, March 18, 2008.

¹¹ *Id.*

¹² By tailoring an allocation to one private party's business plan, the Commission reduces the prospect of a robust auction, because potential bidders with different business plans are less likely to participate. Further, unless the Commission completely ignores the public interest and gives the designer of the allocation all that it wants, the Commission has no assurance that anyone, including the designer, will bid on the spectrum.

orphaned 5 MHz of spectrum. This block, which is well-suited to low-power mobile use in a paired configuration, is largely useless on a stand-alone basis, and in fact would probably go unauctioned and unused. Thus, the Commission is violating its statutory mandates: (a) to use spectrum efficiently,¹³ and (b) to seek to recover for the public a fair value for scarce spectrum.¹⁴ In effect, the Commission would be wasting potentially-valuable spectrum in order to achieve a result that is speculative at best. Further, since the Commission has failed to include such 5 MHz in the *FNPRM*, the Commission is now inhibited, if not totally precluded, from allocating it without issuing a further notice of proposed rule making that would include such a proposal. Rather, the Commission should retain the J Block as paired spectrum in order to allow as many wireless entities as possible an opportunity to provide numerous broadband pipes to the home.

The Commission should not remove valuable, necessary paired spectrum in a risky attempt to foster a “third pipe” to the home. Wireless carriers already are making substantial progress toward creating a third, fourth and fifth pipe to the home.¹⁵ Three nationwide wireless carriers already offer broadband service, with T-Mobile currently in the process of entering the broadband market as well.¹⁶ Further, Clearwire has combined its wireless broadband assets with Sprint Nextel and others in order to create yet another broadband pipe to the home with over 100 MHz of spectrum.¹⁷ The data speeds promised by Sprint/Clearwire far exceed those contemplated for the purportedly free wireless broadband service envisioned for AWS-3. Rural, regional and mid-tier carriers also are moving ahead with plans to implement wireless broadband

¹³ 47 U.S.C. § 309(j)(3)(D).

¹⁴ 47 U.S.C. § 309(j)(3)(C).

¹⁵ *See Ex Parte* Letter from Thomas J. Sugrue to Kevin J. Martin, WT Docket No. 07-195 at 4 (filed June 5, 2008).

¹⁶ *Id.*

¹⁷ “Sprint, Clearwire Position WiMax as Third Pipe,” *Wireless Week*, June 10, 2008.

service. In addition, in rural areas, wireless Internet service providers were in some instances in Auctions 66 and 73 able to acquire spectrum to offer competitive alternatives to wireless broadband services. Indeed, the Commission must consider whether a government-mandated free broadband Internet access service, such as is proposed in the *FNPRM*, may actually undermine the competitive forces that already are at work to foster additional wireless broadband pipes. Injecting a mandatory “free” offering into the market could work at cross-purposes against these nascent pro-competitive efforts, and actually forestall additional broadband competition.¹⁸

Furthermore, creating an orphaned 5 MHz of spectrum may constitute an unlawful *de facto* reallocation of the 2020-2025 MHz band without adequate notice under the Administrative Procedures Act.¹⁹ Standing alone, this 5 MHz block of spectrum no longer constitutes AWS spectrum, which the Commission defines as “. . . bandwidth that is sufficient for the provision of a variety of applications, including those using voice and data (such as Internet browsing, messaging services and full motion video) content.”²⁰ Since stranding the 5 MHz would constitute a reallocation away from AWS, the Commission erred in proposing to reassign the 2175-2180 MHz block to AWS-3, without simultaneously seeking comment on the fate of the orphaned 5 MHz of spectrum. Reasoned decision-making requires that the Commission consider all of the natural and foreseeable consequences of its proposed actions, and the agency cannot

¹⁸ Many incumbents which offer, or which plan to offer, wireless broadband Internet access services had to pay significant sums in order to acquire their spectrum, clear it, and build systems. An encumbered designer AWS-3 spectrum allocation that sells to M2Z or another bidder for a bargain-basement price would create an unfair competitive situation, and could drive some of these competitors out of business.

¹⁹ 5 U.S.C. §§ 553, *et seq.*

²⁰ *FNPRM*, note 1.

avoid the obvious, negative public-interest ramifications of devaluing and reallocating the 2020-2025 MHz block by putting consideration of it off to a later date.

B. The Proposed Combination of Spectrum Does Not Resolve the Substantial Interference Concerns

There is *little or no evidence* in the record addressing the interference implications of the previously-unanticipated 25 MHz AWS-3 allocation.²¹ Obviously, thoughtful consideration of potential interference issues is a core obligation of the Commission (as noted in further detail below), and the development of a full and complete record on potential interference is essential. However, the required careful consideration of interference issues related to this proposed allocation has not yet occurred, and may not occur within the short time frame for the filing of comments established by the Commission's *FNPRM*.²² In order to ensure that harmful interference would not be caused to incumbent users, the Commission must undertake open and transparent interference testing and measurements.²³ Indeed, T-Mobile has proposed such testing, and has invited the Commission to witness, review and evaluate the tests.²⁴

²¹ It appears that the Commission failed to undertake any meaningful analysis to determine whether the 5 MHz of spectrum needs to be reassigned to address interference concerns, since the Commission would have been obligated to disclose that engineering analysis as part of this rulemaking. *See, ARRL v. FCC*, 524 F.3d 227 (D.C. Cir. Apr. 2008) ("*ARRL Decision*").

²² Although the Commission granted a brief extension of the comment date, it did not provide interested parties with as much time as they indicated they needed to conduct meaningful tests. *See, "T-Mobile Request for Extension of Time to File Comments,"* WT Docket Nos. 07-195, 04-356 (filed July 1, 2008).

²³ *Cf. Public Notice*, DA 08-118, released January 18, 2008 (announcing the latest FCC Office of Engineering and Technology White Spaces testing program).

²⁴ *Ex Parte* Letter from Kathleen O'Brien Ham to Marlene H. Dortch, WT Docket No. 07-195 (filed June 6, 2008). It is not clear either that the Commission intends to participate in such private testing.

At this point, the Commission has not adequately explained the interference implications of adding 5 MHz of spectrum from the J Block to the AWS-3 allocation.²⁵ MetroPCS believes it would be exceedingly unwise to reassign 5 MHz of prime spectrum in the hope that such reassignment “may” mitigate an interference problem.²⁶ QUALCOMM has noted that “. . . there are no tests in the record to establish whether or not there will be harmful interference from two-way operations on 2155 to 2180 in the AWS-1 receive band. Thus, for the expanded 2155 to 2180 MHz band, there is no evidence to provide whether or not there will be harmful interference into the AWS-1 mobile receive band.”²⁷ In addition, the Commission must consider whether the “Monte Carlo” approach advocated by M2Z²⁸ is a lawful approach to address interference concerns, in light of the Commission’s obligation under Section 303(f) of the Communications Act to “. . . [m]ake such regulations not inconsistent with law as it may deem necessary to *prevent* interference.”²⁹ Since M2Z’s own engineers effectively concede that there will be mobile-to-mobile interference between AWS-3 and AWS-1 units that are in close proximity to one another, a substantial question is raised as to whether the Commission is even authorized to allow the *FNPRM*’s proposed allocation which will cause actual interference.³⁰ Moreover, at this point there is no support in the record for the assumption made by M2Z and by

²⁵ If the Commission has conducted such testing, it should release the results for public review and comment. Indeed, if the Commission is relying upon particular results and not making them available to the public, it would risk having its allocation overturned on judicial review. *See ARRL Decision*.

²⁶ In fact, the stated “hope” demonstrates that the proposed action would be arbitrary and capricious, since a “hope” cannot be reasoned rulemaking given the Commission’s statutory mandate to prevent destructive or harmful interference.

²⁷ Letter from Dean R. Brenner to Marlene Dortch, WT Docket No. 07-195 (filed June 8, 2008).

²⁸ *See* Letter from Uzoma C. Onyeije to Marlene Dortch, WT Docket Nos. 07-195 and 04-356 (filed June 3, 2008) at “Alion AWS-3 to AWS-1 Mobile-Mobile Interference Effects,” pp. 1-2.

²⁹ 47 U.S.C. § 303(f). (emphasis supplied).

³⁰ *See* Letter from Uzoma C. Onyeije to Marlene Dortch, note 28, *supra*.

its technical consultant that the number of instances in which AWS-1 and AWS-3 units will be in proximity and will interfere with each other is acceptable or inconsequential. To the contrary, relying upon statistical probabilities in the ‘Monte Carlo’ model means that, in some instances, there will be substantial interference.

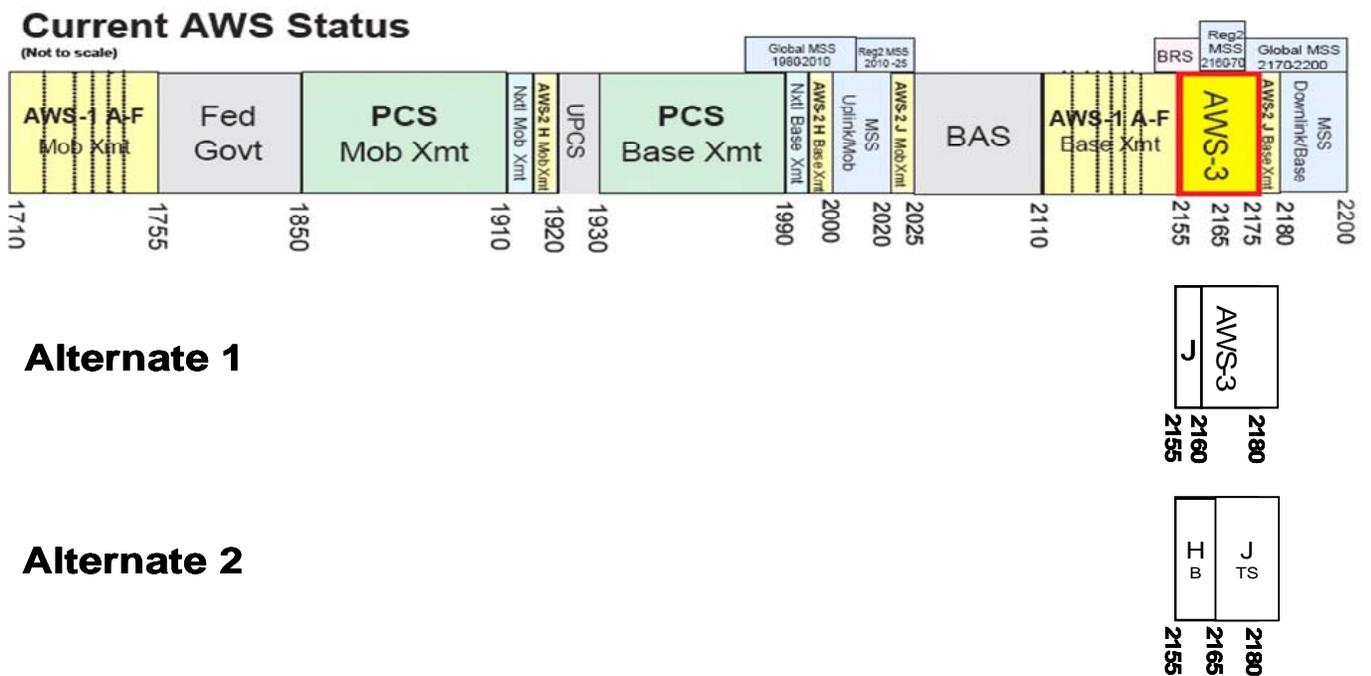
Adding 5 MHz of spectrum to the AWS-3 band also would not solve the significant problems created by the power level inside the receiver passband filter. A better approach would be for the Commission to adopt a reduction in power over the 2155-2175 MHz spectrum, which would allow mobile operations to exist in the AWS-3 band, and promote competition by retaining the paired J Block spectrum. Although a reduction in power to 0 dBm/MHz would be required in order to remove all possibility of interference, reducing power to 8 dBm/MHz would help substantially by reducing the radius of the area affected to something under 3 meters. Standing alone, this change would not be sufficient, but coupled with sensing technology to prevent AWS-3 transmitters from operating while AWS-1 units are in operation in close proximity, the potential for interference would be reduced substantially.

There are other technical reasons why changing the allocation from 20 MHz to 25 MHz of spectrum increases rather than decreases the prospects for harmful interference. In general, it is more difficult to build pass band filters to attenuate interference over a broader bandwidth. It is an engineering maxim that the Q of a filter needs to be increased as the bandwidth to be notched out goes up, assuming the same amount of necessary attenuation. Accordingly, building a filter to notch out 20 MHz of spectrum will cost less and be smaller than a filter that is designed to notch out 25 MHz of spectrum. Therefore, even though the Commission believes that 25 MHz “may” help to eliminate interference, in fact the broader bandwidth may make it more difficult for the AWS-1 licensee to eliminate the interference.

In sum, at this point, there is no legal justification or adequate record support for removing 5 MHz from the AWS-2 band and combining it with the AWS-3 band. Rather, the Commission should consider whether there are there other, equally-effective means to address interference concerns without destroying the paired J Block. Several possible alternates are discussed by MetroPCS below.

C. The Commission Should Consider Alternatives That Will Not Destroy the J Block

If the Commission should decide, against all technical evidence, to allocate the AWS-3 for mobile transmissions, it should take steps to reduce potential interference. There are a number of alternates that the Commission can implement, in lieu of the drastic action of removing 5 MHz of spectrum from the paired J Block. The following two alternate band plans merit consideration:



MetroPCS advocated the first alternative during prior meetings with the Office of Engineering and Technology (“OET”).³¹ Alternate 1 would result in interference-related benefits by moving the 5 MHz base transmit portion of the AWS-2 J Block from 2175-2180 MHz to 2155-2160 MHz, and shifting the AWS-3 Block from 2155-2175 MHz to 2160-2180 MHz. This change would put the base transmit portion of the J Block adjacent to the base transmit frequencies for the A through F channels in the AWS-1 band, and would thereby facilitate the development of mobile units that would be better able to avoid interference through the use of front-end filters operating within a narrower frequency range. Further, this relocated 5 MHz band would act as a guardband between the AWS-3 and AWS-1 allocations. Moreover, since the J Block is configured in a manner similar to the AWS-1 spectrum, having the allocation next to AWS-1 would facilitate the development of equipment for the J Block, since the filter would only need to be expanded by 5 MHz, rather than by 25 MHz. This would allow for mobile operations in the AWS-3 band, save the J block from being rendered completely useless, and facilitate efficient use of the J Block.³²

Alternatively, the Commission could subdivide the 20 MHz of AWS-3 spectrum into two 10 MHz blocks, which would be reassigned to the H and J blocks, respectively, thus creating asymmetrically-paired spectrum. This configuration would be well-suited to high-speed data use, because the pairings would emulate the asymmetrical data flow that exists with current Internet services, and would also allow for interference-free use of the AWS-3 spectrum by eliminating the mobile-to-mobile interference concerns related to mobile use of AWS-3.

³¹ See *Ex Parte* Letter from Carl W. Northrop to Marlene H. Dortch, WT Docket Nos. 07-195 and 04-356 (filed June 5, 2008).

³² Relocating the 5 MHz J Block band would put the AWS-3 allocation closer to the mobile satellite system (“MSS”) band. However, if the Commission is using a Monte Carlo analysis to justify allocation of AWS-3 for mobile transmit, the MSS band would be less intensively used than the AWS-1 band, and thus there would be a lesser prospect of interference.

Another option is for the Commission to apply the same out-of-band emission (“OOBE”) standards to mobile operations in the AWS-3 block that it proposes for mobile operations in the H Block, and to limit mobile transmit power. This would avoid having to add 5 MHz to the AWS-3 allocation to reduce interference. For instance, for mobile operations in the H Block, the Commission is requiring “. . . mobiles at 1915-1920 MHz to attenuate OOBE by $90 + 10 \log P$ dB within the PCS band (1930-1990 MHz band).”³³ By using these OOBE standards in the AWS-3 band and a mobile power limit of 8dBm/MHz/EIRP, the Commission could allow for mobile use in the AWS-3 band, protect incumbents in the AWS-1 band, and maintain the AWS-3 block at 20 MHz.

The Commission also should reduce the maximum power level for mobile transmissions in the AWS-3 band, which would allow for the use of mobile transmissions while limiting the possibility of harmful interference to incumbent operations. Specifically, the Commission should reduce the power levels to 8 dBm/MHz/EIRP in urban areas and 23 dBm/MHz/EIRP in rural areas. This is justified because current broadband mobile networks already run with power at this level – indeed, the 8 dBm/MHz/EIRP is based upon tests of both the current PCS and AWS networks of MetroPCS. By using differing power levels for urban and rural areas, the Commission would provide greater protection against interference, since AWS-3 mobile units are most likely to be in closer proximity to incumbent operations in congested urban areas, which generate more mobile usage. Indeed, the Monte Carlo interference analysis that M2Z has relied upon certainly suggests that it is much more likely for interference to occur in urban areas.

³³ *FNPRM*, at para. 4.

Notably, the Commission previously has adopted different power limits for urban and rural areas.³⁴

A lower power limit for AWS-3 mobile units is particularly necessary because of the perverse incentives that would drive any provider of so-called “free” wireless broadband service. Most wireless carriers have inherent incentives to utilize as little mobile power as possible, in order to preserve the battery life of mobile units. But as is discussed in greater detail below, the AWS-3 service provider has no financial incentive to encourage the use of the “free” service and thus no incentive to maximize the battery life enjoyed by the users. Also, because of the necessary high nationwide build-out requirements, a “free” service provider will have every incentive to provide as much coverage using as little infrastructure as possible. This could lead to using as much mobile power as possible, in order to increase mobile coverage and reduce the number of receivers. Any such increase in mobile power would increase the likelihood of harmful interference to incumbent operations. By mandating lower power limits, the Commission would ensure that any such provider of “free” services does not unnecessarily use increased power, which would be more likely to result in harmful interference to existing operations.

In sum, the alternative proposals suggested by MetroPCS would simultaneously protect against interference, allow mobile use in the AWS-3 band, and permit increased competition in the wireless marketplace by allowing the J block to be auctioned off as paired spectrum. In any event, in suggesting these alternatives, MetroPCS still urges the Commission to conduct a rigorous interference analysis.

³⁴ *Modification of Parts 2 and 15 of the Commission’s Rules for Unlicensed Devices and Equipment Approval*, 19 FCC Rcd. 13539 at para. 17 (rel. Jul. 12, 2004).

II. THE COMMISSION MUST PROTECT AGAINST HARMFUL INTERFERENCE INTO THE AWS-1 AND BROADBAND PCS BANDS

The Commission has an obligation to protect against harmful interference to existing allocations. This obligation means that the Commission must adopt power limits, operating rules, and OOB safeguards in order to protect incumbent AWS-1 and broadband PCS operations from AWS-3 and AWS-2 uses.

MetroPCS purchased approximately \$1.4 billion worth of spectrum in the AWS-1 auction. At this point, MetroPCS is actively constructing networks on this spectrum, and in doing so is bringing additional competition to many markets in the wireless industry. MetroPCS already has commenced service over AWS-1 spectrum in a number of areas.³⁵ In addition to launching AWS service in new markets, MetroPCS has been actively selling AWS-1-capable handsets to the public in existing markets since late March 2008, in order to facilitate roaming. At this point thousands of handsets have been sold and the numbers are increasing every day.³⁶ MetroPCS also offers service over the broadband PCS spectrum, which may be implicated by the Commission's AWS-2 allocation. The Commission must ensure that any service rules that it may adopt in the AWS-3 band do not inhibit MetroPCS and others from continuing to provide the beneficial and sorely needed competition they bring to the wireless marketplace. As noted by CTIA, AWS-1 licensees were not on notice concerning operations in the AWS-3 and AWS-2

³⁵ "MetroPCS Northeast Expansion Begins," *Telephony Online*, July 2, 2008 (noting service over AWS spectrum in Philadelphia, Las Vegas, and Shreveport, LA).

³⁶ If the Commission does decide to allocate AWS-3 in the manner set forth in the *FNPRM*, existing handsets would need to be modified. Since the process would take many months, the Commission either would see a lessening of competition from AWS-1 until these new handsets are available, or complaints from customers about poor service as a result of interference. Neither would serve the public interest.

band that could potentially cause harmful interference to AWS-1 and PCS operations.³⁷

MetroPCS agrees with CTIA that “. . . [s]hould the Commission proceed down this path, the Commission would risk the integrity of its auction process generally.”³⁸

One of the most important obligations the Commission has is to protect existing licensees against harmful interference. It is widely accepted that protecting against interference is a top priority of the Commission. Section 303(f) of the Communications Act of 1934, as amended (the “Act”), the most pertinent provision related to the regulation of interference, provides:

Except as otherwise provided in this chapter, the Commission from time to time, as public convenience, interest, or necessity requires, shall . . . [m]ake such regulations not inconsistent with law as it may deem necessary to prevent interference between stations and to carry out the provisions of this chapter: *Provided, however,* That changes in the frequencies, authorized power, or in the times of operation of any station, shall not be made without the consent of the station licensee unless the Commission shall determine that such changes will promote public convenience or interest or will serve public necessity, or the provisions of this chapter will be more fully complied with.³⁹

In addition, Section 303(y) of the Act provides: “. . . the Commission . . . shall . . . [h]ave authority to allocate electromagnetic spectrum so as to provide flexibility of use, if . . . such use would not result in harmful interference among users.”⁴⁰ Thus, Section 303 directs the FCC to regulate telecommunications in order to prevent interference; further, it prohibits spectrum allocations that will or may cause harmful interference. The Commission’s rules define “harmful

³⁷ *Ex Parte* Letter from Christopher Guttman-McCabe to Marlene H. Dortch, WT Docket Nos. 04-356, 07-195 at 4 (filed June 18, 2008). Section 309(j) of the Communications Act requires the Commission to place interested bidders on notice of the characteristics of licenses and bidding rules in advance of the auction and, thereby, to enable those bidders to “. . . develop business plans, assess market conditions, and evaluate the availability of equipment for the relevant services.” See 47 U.S.C. § 309(j)(3)(E)(i-ii).

³⁸ *Id.*

³⁹ 47 U.S.C. § 303(f) (emphasis added).

⁴⁰ 47 U.S.C. § 303(y).

interference” as “Interference which endangers the functioning of a radionavigation service or of other safety services or seriously degrades, obstructs, or repeatedly interrupts a radiocommunication service operating in accordance with [International] Radio Regulations.”⁴¹

While the Commission enjoys substantial deference when making interference determinations, such deference is not unlimited.⁴² The Commission must affirmatively determine that harmful interference will not occur.

The Commission should not blindly promulgate rules in this proceeding without undertaking a thorough evaluation, backed by actual testing, to determine whether harmful interference will be caused to incumbent services if mobile transmissions are allowed in the AWS-3 band with the operating parameters proposed in the *FNPRM*. At this point, the Commission has not conducted actual field testing. Indeed, Commission staff indicated in a meeting with representatives of T-Mobile that “. . . the Commission staff has performed no testing to quantify the scope of AWS-3 interference into AWS-1 spectrum” and that the staff “. . . believe any interference that would be initiated by AWS-3 devices into AWS-1 spectrum could be eliminated or mitigated by AWS-1 license holders *not using* their licensed spectrum in the 2110 to 2155 MHz band.”⁴³ MetroPCS agrees with T-Mobile that “. . . interference from newcomers, more than two years after auction and licensing of AWS-1 spectrum, could not be resolved by the unlawful and inefficient setting aside of previously bought and licensed

⁴¹ 47 C.F.R. § 2.1(c).

⁴² MetroPCS fails to see how a statistical probability analysis - - such as a Monte Carlo analysis - - can be used to predict that no harmful interference will occur, inasmuch as the Monte Carlo approach can only estimate the odds of such interference occurring.

⁴³ *Ex Parte* Letter from Kathleen O’Brien Ham to Marlene H. Dortch, WT Docket No. 07-195 (filed June 6, 2008). It is completely inappropriate for the Commission to conclude that the way to prevent interference is for a licensed user to stop using previously licensed spectrum in a lawful manner to protect a new licensee. This is not an acceptable method for preventing harmful interference, particularly when the incumbent paid a market price for its spectrum at auction with no notice of the potentially-prohibited use.

spectrum.”⁴⁴ It is inconceivable that the Commission would require AWS-1 license holders to “. . . internalize a guard band within their own auctioned and licensed AWS-1 spectrum to protect from AWS-3 uses.”⁴⁵ Moreover, T-Mobile has noted that laboratory tests performed by its engineers “. . . verify that filters alone will not solve the interference problems created by mobile operations in the AWS-3 band.”⁴⁶ MetroPCS believes that the Commission must conduct testing in order to ensure that this type of harmful interference does not affect operations in the AWS-3 band.

These are not merely the isolated views of incumbent licensees MetroPCS and T-Mobile. There have been objections from a substantial number of other interested entities, including Samsung, Ericsson, QUALCOMM, Rural Cellular Corporation, Rural Broadband Group, CTIA, and Verizon Wireless. All of these entities have expressed substantial concerns regarding potential interference into the AWS-1 band from AWS-3 operations.⁴⁷ The decision of the equipment manufacturers to weigh in on this point is particularly notable, since they often are reluctant to take sides in allocation disputes. The Commission should not ignore these objections, nor rush to initiate service rules that could end badly. Rather, the Commission should conduct testing and promulgate rules with full knowledge of the ramifications.⁴⁸ Any other

⁴⁴ *Id.*

⁴⁵ *Ex Parte* Letter from Howard J. Symons to Marlene H. Dortch, WT Docket No. 07-195 (filed June 20, 2008) at AWS-3 Issues, p. 3.

⁴⁶ *Id.* at p. 4.

⁴⁷ *See, e.g., Ex Parte* Letter from Thomas J. Sugrue to Kevin J. Martin, WT Docket No. 07-195 at 2 (filed June 5, 2008).

⁴⁸ It is ironic that the last auction at which rural, regional and mid-tier carriers were able to garner spectrum was Auction 66 - - involving the same spectrum that is now imperiled by the AWS-3 service rules. The Commission, by taking away the J Block and destroying an existing allocation held by many rural, regional and mid-tier carriers, would be seriously undermining competitors and possibly disabling competition in certain markets where it is just beginning.

course would be arbitrary and capricious and would subject the allocation to legitimate legal challenges.

In addition, the Commission's proposed rules do not discuss the steps that an AWS-3 licensee would be obligated to take if interference were in fact to occur. There is no mention of whether a "first-in-the-field" or "first-in-time" rule would apply, which would obligate a later licensee to protect the first licensee to be authorized, and take affirmative steps to eliminate any interference that may occur. MetroPCS proposes that, at a minimum, the Commission must adopt such a rule in order to protect the AWS-1 and broadband PCS licensees that already have spent large sums to purchase spectrum and currently are devoting substantial resources to building out their networks. A first-in-the-field rule is particularly necessary to protect incumbents, since the evidence of record clearly indicates that harmful interference would occur in at least some instances.

The Commission repeatedly has utilized a first-in-the-field or first-in-time approach to protect incumbents from interference. For instance, the Commission's Rules reflect a first-in-the-field interference protection policy for Part 25 Satellite Communications⁴⁹ and for Part 101 Fixed Microwave services.⁵⁰ Similarly, in providing for Narrowband Private Land Mobile Radio Channels in the 150.05 -150.8 MHz, 162-174 MHz, and 406.1-420 MHz bands, the Commission

⁴⁹ 47 C.F.R. § 25.203(c): "Prior to the filing of its application, an applicant for operation of an earth station, other than an ESV, shall coordinate the proposed frequency usage with existing terrestrial users and with applicants for terrestrial station authorizations with previously filed applications in accordance with the following procedure:"

⁵⁰ See e.g., 47 C.F.R. § 101.103(d)(1) ("Proposed frequency usage must be prior coordinated with existing licensees, permittees and applicants in the area, and other applicants with previously filed applications, whose facilities could affect or be affected by the new proposal in terms of frequency interference on active channels, applied-for channels, or channels coordinated for future growth."); 47 C.F.R. § 101.1333(2) ("Frequencies . . . are available for use on a coordinated, first-in-time, shared basis subject to protecting grandfathered stations."); 47 C.F.R. § 101.1523(3) ("Protection of individual links against harmful interference from other links shall be granted to first-in-time registered links.")

indicated that “. . . [o]ur approach preserves our traditional first-in-time policy . . .” (emphasis added)⁵¹ Finally, the Wireless Telecommunications Bureau established a first-in-time framework for AWS operations in the 1.7 GHz and 2.1 GHz Bands when it encouraged PCIA’s and CTIA’s private efforts to protect first-in-time primary adjacent-channel operations.⁵²

In addition to a first-in-the-field or first-in-time rule, the Commission should require AWS-3 mobile units to be equipped with technology that would allow such units to sense when they are in proximity to a transmitting incumbent licensee device. This sensing would allow the AWS-3 devices to avoid “stepping on” voice calls that are in process on existing networks – which would result in dropped calls. This solution would ensure that critical incumbent voice communications are not interfered with by AWS-3 operations. Indeed, the worst scenario would be if a 911 call on an existing network was dropped due to harmful AWS-3 operations. Requiring such sensing technology in AWS-3 mobile units would avoid such a potentially-catastrophic scenario.

MetroPCS also agrees with CTIA that allowing harmful interference to disrupt existing operations may result in a violation of the takings clause of the Constitution.⁵³ A “*per se*” taking in violation of the 5th Amendment of the Constitution occurs when a governmental action results in a “permanent physical occupation” or denies the owner of the property all economically-

⁵¹ *Report and Order* in the matter of Amendments of Part 2 and 90 of the Commission’s Rules to Provide for Narrowband Private Land Mobile Radio Channels in the 150.05 -150.8 MHz, 162-174 MHz, and 406.1-420 MHz Bands, 20 FCC Rcd. 9882, at para. 32 (rel. March 11, 2005).

⁵² In the Matter of Amendment of Part 2 of the Commission’s Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, Including Third Generation Wireless Systems and Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands, *Order*, 22 FCC Rcd. 4680, at para. 31 (rel. March 8, 2007).

⁵³ Letter from Christopher Guttman-McCabe to Ms. Marlene Dortch, note 37, *supra*, at 5.

beneficial use of property.⁵⁴ The interference from AWS-3 operations may be so harmful as to render a portion of the AWS-1 spectrum unusable.⁵⁵ Such a “taking” could be unconstitutional, as “. . . government regulation that burdens property in a manner that, among other things, unfairly interferences with the owner’s ‘investment-backed’ expectations constitutes a regulatory taking.”⁵⁶ Significantly, federal courts have noted that licensees enjoy a limited property right in an FCC license.⁵⁷ Since government regulation that burdens property in a manner which unfairly interferes with the owner’s “investment-backed expectations” constitutes a regulatory taking, the Commission’s proposed service rules, which if implemented could render significant portions of licensees’ investment in the broadband PCS and AWS-1 spectrum possibly useless, may constitute a regulatory taking.

III. THE MANDATED “FREE” WIRELESS BROADBAND SERVICE RAISES SUBSTANTIAL CONCERNS

A. The Commission Should Not Create a Designer Allocation for M2Z

There is no mention of M2Z anywhere within the Commission’s *FNPRM*. This is very surprising, because M2Z has been lobbying for a substantial period of time for rules for the AWS-3 spectrum based upon M2Z’s business plan to provide wireless broadband service with a supposedly “free” service component and content filtering. Indeed, the following comparison of the proposals in the Commission’s *FNPRM* with the requests made by M2Z in its May 5, 2008

⁵⁴ See *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 426 (1982).

⁵⁵ Letter from Christopher Guttman-McCabe to Ms. Marlene Dortch, note 37, *supra*, at 5.

⁵⁶ *Id.*; see *Penn Cent. Transp. Co. v. City of New York*, 438 U.S. 104, 124 (1978).

⁵⁷ *In re Atlantic Business and Community Development Corp., Internal Revenue Service v. Thomas J. Subranni*, 994 F. 2d 1069 (3rd Cir. 1993) (IRS argues that FCC license is property for purposes of attaching tax lien under Bankruptcy Code).

ex parte submission⁵⁸ amply demonstrates that the Commission clearly is designing this block of spectrum for M2Z with only minor variations from M2Z's desires.⁵⁹

COMPARISON BETWEEN M2Z PROPOSAL AND COMMISSION <i>FNPRM</i>	
M2Z REQUESTS FROM M2Z MAY 5 <i>EX PARTE</i>	COMMISSION <i>FNPRM</i>⁶⁰
Proposed framework for the provision of a new, free, nationwide wireless broadband service ⁶¹	Proposed framework for the provision of a new, free, nationwide wireless broadband service
Nationwide license ⁶²	Nationwide license
Permit uplink and downlink operations throughout band ⁶³	Permit uplink and downlink operations throughout band
Licensee is only obligated to use up to 25% of capacity for the "free" service ⁶⁴	Licensee is only obligated to use up to 25% capacity for the "free" service
"Free" service must be provided at data rate of 768 kbps downstream ⁶⁵	"Free" service must be provided at data rate of 768 kbps downstream
Open platforms for devices and applications for premium service ⁶⁶	Open platforms for devices and applications for premium service
Only open platforms for devices for "free" service ⁶⁷	Only open platforms for devices for "free" service
"Always on" network-based filtering mechanism ⁶⁸	"Always on" network-based filtering mechanism

⁵⁸ *Ex Parte* Letter from Uzoma C. Onyeije to Marlene H. Dortch, WT Docket No. 07-195 (filed May 5, 2008) (“M2Z May 5 *Ex Parte*”).

⁵⁹ The apparent reluctance on the part of the Commission to alter the AWS-3 allocation from the M2Z plan may reflect concern that making changes could cause M2Z not to participate in the forthcoming auction for the spectrum, or cause M2Z to lose backers, which appears to be what happened when the Commission altered the 700 MHz D Block allocation from the Frontline Wireless plan. Rather than design the allocation solely for M2Z, the better course would be for the Commission to abandon the M2Z plan altogether, to make a flexible unencumbered allocation and encourage all comers to participate.

⁶⁰ All references are to the *FNPRM*, at para 3.

⁶¹ M2Z May 5 *Ex Parte*, at 4.

⁶² *Id.* at 7.

⁶³ *Id.* at 9.

⁶⁴ *Id.* at 11.

⁶⁵ *Id.* at 4.

⁶⁶ *Id.* at 17.

⁶⁷ *Id.* at 18.

⁶⁸ *Id.* at 19.

OOBE attenuated by 43 + 10 log (P) db outside of AWS-3 band ⁶⁹	OOBE attenuated by 60 + 10 log (P) db outside of AWS-3 band
Base station power limit should be 1000 watts/MHz ERP (2000 watts/MHz ERP in rural areas) ⁷⁰	Base and fixed downlink stations power limit of 1640 watts peak EIRP (3280 watts peak EIRP in rural areas)
Mobile stations should be limited to 30 watts ERP ⁷¹	Mobile stations should be limited to 23 dBm/MHz EIRP
Build-out: Provide signal coverage and offer service to (1) at least 40% of the United States population within 4 years from its commencement of operations; (2) at least 75% of the population within 7 years of its commencement of operations; and (3) at least 95% of the population within ten years of its commencement of operations. Prior to the start of the time for measuring these build-out milestones, the AWS-3 licensee should be afforded a maximum of 2 years to commence operations ⁷²	Build-out: Provide signal coverage and offer service to (1) at least 50% of the total population of the nation within 4 years of commencement of the license term and (2) at least 95% of the total population of the nation at the end of the 10 year license term (although the Commission appears to give the licensee an out, and will allow for less-restrictive build-out, as well)
License Term: 15 year initial license term ⁷³	License Term: 10 year initial license term

This comparison leaves no serious doubt that this is a designer allocation specifically tailored to one potential bidder's business plan.⁷⁴

MetroPCS strenuously objects to designer allocations of this nature. As the Commission's recent experience with the 700 MHz D-Block demonstrates, designer allocations run the risk that they are so closely tied to a particular entity's business model that the auction of the spectrum burdened by such a designer plan will not prove to be robust, and the allocation will fail if the designer's business entity fails. Further, the closer a rulemaking is tied to a particular proponent's business plan, the greater the risk that the Commission will be found to have delegated its policymaking role to a private party. To do so, of course, would be entirely

⁶⁹ *Id.* at 10.

⁷⁰ *Id.* at 10.

⁷¹ *Id.* at 10.

⁷² *Id.* at 12.

⁷³ *Id.* at 13.

⁷⁴ The fact that the Commission failed to mention in the *FNPRM* the M2Z May 5 *ex parte* may indicate that the agency is seeking to downplay the length to which it has gone to accommodate the M2Z proposal.

inappropriate under the Act and would subject any such decision to legal challenge. The better approach would be for the Commission to retain its policy making authority, reject designer and outdated command-and-control allocations, provide minimum operating restrictions, allow flexibility of use, and let the marketplace determine the highest and best use for this spectrum.

The Commission's experience with the D-Block amply demonstrates the pitfalls of an allocation tailored to one company or to one particular business plan. Although the Commission has on occasion sought to downplay this fact, the reality is that the Commission's prior D Block allocation was heavily influenced by Frontline Wireless ("Frontline"), which actively participated in the allocation process to craft a spectrum allocation that would allow Frontline to purchase 10 MHz of spectrum (and gain access to another 10 MHz of spectrum) based upon its unique public/private partnership business plan. Many commenters - - including MetroPCS - - expressed the view at the time that the rules proposed by Frontline, which were largely adopted by the Commission, would seriously reduce the number of bidders for the D-Block spectrum. As it turned out, Frontline did not show up at the auction, and no other entity expressed any significant interest in purchasing the D-Block on the terms and conditions set forth by the Commission when it largely adopted Frontline's proposal for how that spectrum would be put to use. Thus, when the Frontline business plan failed and Frontline was unable even to make the requisite upfront payment, any possibility of a successful D Block outcome in Auction 73 collapsed as well.

Unfortunately, the Commission appears to have learned very little from its D Block experience, as it now is heading down the same ill-fated path to adopt rules that fit almost

perfectly with the business plan of M2Z. This, once again, runs the risk of a poorly attended auction that will fail if the unproven business plan of M2Z should also fail.⁷⁵

MetroPCS previously has indicated in multiple comments to the Commission that command-and-control spectrum allocation policies designed to meet specific business plan, or specific Commission-imposed objectives are not nearly as beneficial as market-based policies in which spectrum is auctioned off with minimal restrictions and free market forces are allowed to dictate the particular uses to which the spectrum is put.⁷⁶ Indeed, flexible allocation policies of this nature - - which have been endorsed in the past by Commission studies⁷⁷ - - have been a roaring success, since the wireless industry became highly competitive and the Commission has raised tens of billions of dollars for the U.S. Treasury. The Commission has noted that “. . . Section 309(j) embodies a presumption that licenses should be assigned as a result of an auction to those who place the highest value on the use of the spectrum,. . .” as those parties “. . . are presumed to be those best able to put the licenses to their most effective use.”⁷⁸ Instead of

⁷⁵ To allocate spectrum in a manner that invites serious risk of legal challenge would not fulfill the Commission’s stated desire to foster another broadband pipe to the home. If a legal challenge were made successfully, the additional pipe would be delayed. If the allocation were to fail to attract a bidder, the additional pipe to the home would fail. The only way to get such an additional pipe is to make an open and flexible allocation which will allow the market to decide whether another pipe is needed.

⁷⁶ See MetroPCS Comments filed in WT Docket 06-150, *et al.*, In the Matter of Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, *et al.*, May 23, 2007, at 4, 27-28 (“MetroPCS 700 MHz FNPRM Comments”).

⁷⁷ See Kwerel, Evan and Williams, John, *A Proposal for a Rapid Transition to Market Allocation of Spectrum*, Office of Plans and Policy Working Paper 38, Federal Communications Commission, at pp. 3-4, November 2002. “[a]n ideal market allocation should impose no restrictions on spectrum uses and users beyond those necessary to limit interference, to prevent anti-competitive concentration, and to comply with international agreements.”)

⁷⁸ *NextWave Personal Communications, Inc.*, Order on Reconsideration, 15 FCC Rcd 17500, 17513 (2000).

proceeding with a designer allocation, the Commission should auction this spectrum free of encumbrances.

B. The Commission Lacks Statutory Authority to Dictate the Rates of Wireless Broadband Internet Service

Even if it wanted to, the Commission does not have the statutory authority to regulate rates for a wireless broadband Internet service. Significantly, the Commission has cited no statutory authority that would allow it to regulate the price of a wireless broadband Internet access service (a “free two-way wireless broadband Internet service”⁷⁹ being one where the Commission has set the price at \$0.00). As is demonstrated below, the Commission lacks the authority to impose rate regulation (*i.e.*, mandating a “free” wireless broadband service) upon a service that has been classified by the Commission as an “information service” and is regulated under Title I of Act.⁸⁰

The Commission, in its *Wireless Broadband Order*,⁸¹ defined wireless broadband Internet access service “. . . as a service that uses spectrum, wireless facilities and wireless technologies to provide subscribers with high-speed (broadband) Internet access capabilities.” The Commission proceeded to classify wireless broadband Internet access service as an “information service” under the Act.⁸² Subsequently, the Commission ruled that services would be considered

⁷⁹ *FNPRM*, at p. 21, proposed rule Section 27.1191(b).

⁸⁰ However, MetroPCS notes that the Commission should clarify that it does have the authority to regulate “telecommunications services,” to the extent that such services are not “information services,” that are provided over the AWS-3 spectrum.

⁸¹ *Appropriate Regulatory Treatment for Broadband Access to the Internet Over Wireless Networks*, Declaratory Ruling, 22 FCC Rcd 5901, at para. 19 (rel. Mar. 23, 2007) (“*Wireless Broadband Order*”).

⁸² *Wireless Broadband Order*, at para. 22.

to be high-speed wireless broadband Internet access services subject to the information service classification, if they provided a data rate of 768 Kbps or higher.⁸³

This means that the “free” service⁸⁴ that would be mandated by the Commission on the AWS-3 spectrum clearly qualifies as a high speed wireless broadband Internet access information service. Under Title II of the Communications Act, the Commission has the authority to prescribe rates and practices to ensure that they are just and reasonable and not unreasonably discriminatory – but only for common carrier services.⁸⁵ However, in the *Wireless Broadband Order*, the Commission specifically stated that wireless broadband Internet services are “. . . not subject to Title II common carrier obligations applicable to telecommunications services providers.”⁸⁶ Thus, the Commission does not have authority under Title II to apply rate regulation to an information service, such as wireless broadband Internet service.

Contrary to M2Z’s assertions,⁸⁷ Titles I and III of the Act do not provide a basis for rate regulation of this service. No provision in either Title I or Title III authorizes the Commission to regulate the rates of non-CMRS services. And, the explicit rate regulation provisions that are set forth in Title II make it clear that when Congress intended to empower the Commission to

⁸³ See *Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscriber Data, and Development of Data Interconnected Voice over Internet Protocol (VoIP)*, WC Docket No. 07-38, Report and Order, FCC 08-89 (adopted Mar. 19, 2008).

⁸⁴ MetroPCS herein uses the expression “free” service to refer to the service which the *FNPRM* contemplates would be provided to consumers at no charge. As noted in Section III.C. of these Comments below, however, MetroPCS believes that this so-called “free” service does not come without various costs. Thus, while characterizing the proposal as “free” in the same manner as is used in the *FNPRM*, MetroPCS urges the Commission to reexamine that characterization in light of those comments.

⁸⁵ See 47 U.S.C. §§ 201(a), 201(b), 202(a), 205.

⁸⁶ *Wireless Broadband Order*, at para. 41.

⁸⁷ Letter from Uzoma Onyeije to Marlene H. Dortch, WT Docket Nos. 07-195 and 04-356 (filed July 1, 2008).

regulate rates, it did so by express grants of rate regulation authority. Significantly, the Commission has never used Title I or Title III as a basis to regulate information service rates.⁸⁸ On the contrary, courts have noted that Congress intended Title III to serve as a “. . . less rigorous system of federal control” for services that are not “natural monopol[ies] which create[] the same kinds of risks that a telephone system does.”⁸⁹ Courts repeatedly have deferred to Congressional intent to leave the Internet unregulated, when faced with interpreting various portions of the Act.⁹⁰ Consequently, the self-serving effort of M2Z to read rate regulation authority into the general public-interest language of Titles I and III is incorrect and inappropriate. The only section in Title III that pertains to any form of rate regulation is Section 332, which only provides a basis for regulation of CMRS. Since the Commission already has determined that broadband Internet services are not CMRS, Section 332 cannot form a basis for rate regulation.

M2Z makes number of arguments in support of its claim that the Commission has the authority to regulate the rates of a wireless broadband Internet service – but all of its arguments fall short. First, M2Z argues that the Commission’s proposal to regulate AWS-3 rates under Title III is “not novel,”⁹¹ and purports to cite several cases that allegedly support its argument.⁹²

⁸⁸ M2Z quotes *Schurtz Commc’ns v. F.C.C.*, 982 F.2d 1043 (7th Cir. 1992), to support its argument that the Commission has “enormous discretion” when promulgating license obligations. That case, however, also proves that the FCC’s discretion is by no means unfettered, as the court subsequently vacated the Commission rules at issue. 982 F.2d at 1055.

⁸⁹ *Nat’l Assoc’n of Theatre Owners v. F.C.C.*, 420 F.2d 194, 203 (D.C. Cir. 1969).

⁹⁰ See, e.g., *Southwestern Bell Tel. Co. v. F.C.C.*, 153 F.3d 523, 433 (8th Cir. 1998) (concluding that, based on Congress’ intent to leave Internet unregulated, ISPs should be excluded from the imposition of interstate access charges); *Zeran v. America Online, Inc.*, 129 F.3d 327, 330 (4th Cir. 1997) (recognizing that “Congress acted to keep government regulation of the Internet to a minimum”); *Vonage Holdings Corp. v. Minn. Public Utilities Commission*, 290 F. Supp. 2d 993, 997 (noting that “Congress has spoken with unmistakable clarity” that it intended the Internet to remain unregulated).

⁹¹ *Ex Parte* Letter from Uzoma Onyeije to Marlene H. Dortch, note 87, *supra*, at 1.

M2Z is unable, however, to cite any Commission precedent that is on point. M2Z first discusses the Commission’s adoption of an open platform requirement for C Block licenses.⁹³ The Commission noted, however, that it adopted this “measured step” because the service providers were pro-actively prohibiting web access on certain mobile phones, “. . . blocking or degrading consumer-chosen hardware and applications without an appropriate justification.”⁹⁴ The Commission specifically noted that this type of regulation was not necessary for wireless Internet, because “. . . wireless broadband Internet access services for laptop computers typically allow consumers to access the same applications that would be available had they chosen a cable or wireline broadband Internet access connection.”⁹⁵ The Commission based its Title III authority on the fact that “. . . current practices in the industry may be impeding the development and deployment of devices and applications.”⁹⁶ No similar invidious practice is alleged here. Further, M2Z fails to understand that technical rules are different than rate regulation. The requirement that C Block licenses provide open access is a technical requirement, not a rate regulation. And, of course, nothing that the Commission did in the C Block allocation made that allocation other than a CMRS service which, as shown earlier, is subject to the Commission’s authority to regulate rates.

(...continued)

⁹² *Id.* at 3-4.

⁹³ In the Matter of Service Rules for the 698-746, 747-762, and 777-792 MHz Bands, *Second Report and Order*, 22 FCC Rcd. 15289 (rel. Aug. 10, 2007).

⁹⁴ *Id.* at para. 201.

⁹⁵ *Id.* at para. 198.

⁹⁶ *Id.* at para. 207.

M2Z next discusses the Commission’s decision to extend resale requirements to enhanced services provided by certain CMRS carriers.⁹⁷ The Commission’s short discussion of its Title III authority, however, rested less on the merits of its argument and instead on the fact that “. . . no party has challenged our explicit invocation of Title III.”⁹⁸ The Commission likely gave such a cursory Title III analysis because it subsequently decided on other grounds to exempt certain enhanced services from the resale requirement, and retained the rule only for those enhanced services that were only available as part of a basic telecommunications package.⁹⁹ The rule was therefore tied mostly to Title II-related telecommunications services, and not to pure Title III information services.

M2Z then argues that the Commission’s rules requiring digital broadcast licensees to provide “. . . at least one over-the-air video program signal at no direct charge”¹⁰⁰ are analogous to the rate-regulating rules at issue here.¹⁰¹ The Commission’s rules did not, however, impose a new system of rate regulation on digital television, but instead sought to continue “. . . preserving a free, universal broadcasting service” in the spirit of “. . . our tradition of universal and free broadcast television.”¹⁰² The “Title I and Title III mandates” M2Z cites in its *ex parte* submission are not new rate-regulating provisions discussed in the context of Title I or Title III authority, but are instead more historically-based general goals listed by the Commission in its

⁹⁷ In the Matter of Interconnection and Resale Obligations Pertaining to Commercial Mobile Radio Services, *Memorandum Opinion and Order on Reconsideration*, 14 FCC Rcd. 16340 (rel. Sept. 27, 1999).

⁹⁸ *Id.* at para. 27.

⁹⁹ *See id.* at para. 30.

¹⁰⁰ 47 C.F.R. § 73.624 (2007).

¹⁰¹ *See Ex Parte* Letter from Uzoma Onyeije to Marlene H. Dortch, note 87, *supra*, at 4.

¹⁰² In the Matter of Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service, *Fifth Report and Order*, 12 FCC Rcd. 12809, at paras. 4, 26 (rel. Apr. 21, 1997).

introductory paragraph.¹⁰³ Over-the-air broadcasting services have always been free, and the Commission merely sought to make sure that the characteristic of broadcasting would be preserved when the nature of television broadcast transmissions convert from analog to digital. On the other hand, wireless broadband Internet services are not inherently free services and they have been classified as an information service for regulatory purposes, and thus fall outside of the Commission's rate regulation authority.

In addition to the failings of M2Z's arguments, a fundamental rule of statutory construction provides that if Congress includes particular language in one section of a statute and omits it in another, the omission is intentional and should be interpreted as such.¹⁰⁴ The Supreme Court has said: "Where Congress includes particular language in one section of a statute but omits it in another section of the same Act, it is generally presumed that Congress acts intentionally and purposefully in the disparate inclusion or exclusion."¹⁰⁵

For example, courts have routinely used inclusion-omission principle as a basis for limiting an agency's power.¹⁰⁶ In *SEC v. Bolla*, the District Court for the District of Columbia held that Section 209(e) of the Advisors Act did not authorize the Securities and Exchange

¹⁰³ See *id.* at ¶ 5.

¹⁰⁴ See *Bates v. United States*, 522 U.S. 23, 29-30 (1997); *Russello v. United States*, 464 U.S. 16, 23 (1983); citing *United States v. Wong Kim Bo*, 472 F.2d 720, 722 (5th Cir 1972). See also *Lynch v. Johns-Manville Sales Corp.*, 710 F.2d 1194, 1197 (6th Cir. 1983) ("... it is a fundamental rule of statutory construction that inclusion in one part of a congressional scheme of that which is excluded in another part reflects congressional intent that the exclusion was not inadvertent.").

¹⁰⁵ See *Bates v. United States*, 522 U.S. 23, 29-30 (1997); *Russello v. United States*, 464 U.S. 16, 23 (1983); citing *United States v. Wong Kim Bo*, 472 F.2d 720, 722 (5th Cir 1972). See also *Lynch v. Johns-Manville Sales Corp.*, 710 F.2d 1194, 1197 (6th Cir. 1983) (providing "it is a fundamental rule of statutory construction that inclusion in one part of a congressional scheme of that which is excluded in another part reflects congressional intent that the exclusion was not inadvertent.").

¹⁰⁶ See cases cited in note 105, *supra*.

Commission to seek monetary penalties for aiding and abetting violations, because Congress had specifically authorized such penalties in other contemporaneous securities laws but did not include them in Section 209(e).¹⁰⁷ Without specific congressional authorization in the particular section, the court would not permit the agency to assume it that it had the power to levy penalties. The same reasoning has been applied when considering multiple titles of larger acts. The Americans with Disabilities Act (“ADA”) consists of five titles that govern civil rights laws in distinct areas (*e.g.*, Title I: Employment, and Title II: Public Services, etc).¹⁰⁸ Courts have held that the existence of these five distinct titles means that each title is confined to the area it governs.¹⁰⁹ For example, the fact that Title I covers Employment meant that a police officer could not challenge his termination under the Public Services provisions contained in Title II.¹¹⁰ The court reasoned that the language and structure of the ADA demonstrates that Congress unambiguously did not intend for the other four titles to reach employment discrimination.¹¹¹

In our case, Title II of the Act expressly gives the Commission the authority to regulate rates for common carriers:¹¹² only limited rate regulation authority is referenced in Title III with regard to CMRS services – which do not apply here. By structuring the Act in this manner, Congress demonstrated an intention to allow the Commission to regulate rates in select areas – and not to regulate rates in others. Moreover, Section 303 of the Act provides for explicit authority of the Commission in connection with Title III services, and it does not include any rate regulation authority. Importantly, the Commission has not regulated the rates of any other

¹⁰⁷ *Id.*

¹⁰⁸ 42 U.S.C. §12201, *et seq.*

¹⁰⁹ *See Canfield v. Isaacs*, 523 F. Supp. 2d. 885 (N.D. In. 2007).

¹¹⁰ *Id.* at 891.

¹¹¹ *Id.*

¹¹² 47 U.S.C. §§ 201(a), 201(b).

information service. The Commission should not exceed its authority by seeking to rate-regulate the information services at issue in this proceeding. The lack of specific authorization from Congress to allow the Commission to regulate the rates of those services, combined with the fact that Congress specifically granted the Commission the authority to regulate rates in other contexts, demonstrates that the Commission does not have any implied authority to regulate the rates of such services.

MetroPCS agrees with CTIA that “. . . [t]he Commission . . . cannot rely on its ancillary [Title I] jurisdiction to impose the kind of access and rate regulation at issue here,”¹¹³ and that “. . . the Commission lacks jurisdiction under Section 706 of the Telecommunications Act or under its Title I ancillary jurisdiction”¹¹⁴ to impose rate regulation upon a wireless broadband Internet service. Thus, the Commission does not have the authority to mandate a supposedly “free” wireless broadband offering, as it has attempted to do with its proposed rules. Since it appears to be the “free” component of the M2Z proposal that motivated the Commission to allocate the spectrum in this manner, the failure of that component of the proposal should cause the Commission to rethink the allocation, because it will no longer serve the stated public-interest objectives. Rather, the Commission should auction off the AWS-3 spectrum without any encumbrances, and if the market should decide that the highest and best use of the spectrum is to provide a truly free wireless broadband service over it, then the spectrum will be used accordingly. Otherwise, it will be used for whatever is the highest and best use of the spectrum.

¹¹³ *Ex Parte* Letter from Paul Garnett to Marlene H. Dortch, WT Docket Nos. 04-356 and 07-195 at 1 (filed June 26, 2008).

¹¹⁴ *Id.* at 2.

C. The Proposed Rules Leave Critical Questions Unanswered with Regard to the Purportedly “Free” Wireless Broadband Service

If the Commission should mistakenly conclude that it has the statutory authority to mandate a free wireless broadband service, it must propose rules that ensure that the eventual licensee will actually provide the free service that the Commission has in mind. However, at this point, the Commission’s proposed rules for a free wireless broadband service raise more questions than offer answers regarding such a service. Indeed, the proposed rules are very short on specifics. MetroPCS submits that the Commission must incorporate into its rules answers to the questions enumerated in what follows. Otherwise, the winner of the AWS-3 spectrum may be able to circumvent – or avoid entirely – its obligations to the public and thus not meet the stated public-interest objective of the *FNPRM*.

1. What Does the “Free” Broadband Service Encompass?

The proposed rules do not specify how the “free” wireless broadband service is to be defined. By failing to adopt a precise definition for free service, the Commission could allow the licensee to create a second-class service that may be a poor substitute for the premium services it provides. For example, the free service could have the same theoretical 47 dBu contour as the premium service, but not have similar building penetration and actual coverage as the premium service. The Commission should promulgate rules that will ensure that the licensee will provide the public with a truly free wireless broadband service equal in all respects (except as to data speed) to the premium service, and not something that is little more than a promotional device for the licensee’s fee-based services.

For example, the Commission’s proposed rules¹¹⁵ appear to contemplate that a free service would be able to be advertiser-supported. If so, the user could constantly be bombarded

¹¹⁵ See *FNPRM*, at p. 26, proposed rule Section 27.1193(a)(2).

with pop-up ads and display banners that may distract from his or her Internet experience, since the Commission has not proposed any limits on the nature or extent of permissible advertising. MetroPCS believes that the Commission should be wary of any advertiser-supported free Internet business model. Advertiser-supported Internet access business models have proved to be unsuccessful in the past, “. . . whether offered as part of a government sponsored proposal (Philadelphia’s and San Francisco’s Muni-WiFi initiatives) or strictly on a private basis (Juno and NetZero’s advertiser-supported dial-up Internet access).”¹¹⁶ The Commission should adopt a rule that limits the amount and type of advertising services that can come tied to the “free” wireless service. The Commission should not allow a licensee to provide a so-called “free” wireless broadband service that constantly bombards a user with advertisements that degrades the user’s Internet experience and turns the “free” service into a bait-and-switch scheme designed to lead the user to purchase premium services. Advertising can also slow the effective data rate for the content the user wants. For example, if every third packet of transmitted data contains advertising bits, the effective speed of the service would be diminished by one-third. The Commission should mandate that any advertisements be barred altogether or extremely limited, in order to allow for an Internet experience that is comparable to any fee-based service offered by any entity over the AWS-3 spectrum.

Moreover, the Commission should clarify how robust the “free” service must be. For instance, it is unclear whether the licensee could offer a service that only provides limited access to the Internet or access at a significantly-reduced speed, thus making the free-use experience little more than a teaser for the licensee’s premium fee-based services. It is also unclear whether

¹¹⁶ See *Ex Parte* Letter from Thomas J. Sugrue to Kevin J. Martin, WT Docket No. 07-195 at 3 (filed June 5, 2008); see also *Ex Parte* Letter from Christopher Guttman-McCabe to Marlene H. Dortch, WT Docket Nos. 04-356 and 07-195, at 5 (filed June 5, 2008) (noting failure of advertiser business model-based companies such as NetZero, Juno, Spinway, Freei and Bluelight).

the licensee of a “free” wireless broadband service would be allowed to create a “walled garden” for that particular service tier, in which consumers would be limited from the full use of the Internet, or would have to use a browser supplied by the licensee in order to gain access to the Internet. Further, nothing in the Commission’s proposed rules deals with the speed and capacity of the backhaul facilities that will be used to deliver the service. The backhaul bandwidth can be manipulated to severely degrade the free service. The Commission should clarify what services the AWS-3 licensee can and must provide for “free,” and whether there are any categories of services that the licensee may prohibit.¹¹⁷ For example, can or must the AWS-3 licensee allow users to utilize Skype-like technology to provide interconnected voice-over-Internet-protocol (“VoIP”) services?

It does appear that the Commission anticipates allowing this “free” service to be limited in various ways. For example, two proposed rules would allow the licensee to limit access to certain types of communications, such as peer-to-peer (“P2P”) file sharing, in order to filter particular content.¹¹⁸ The licensee may also restrict applications on the “free” network, which would result in a usage that is substantially stripped down from an otherwise-unimpaired Internet experience.¹¹⁹ The Commission also notes that the licensee can “. . . manage any additional demand for free service using any lawful network management protocol, . . .”¹²⁰ however, it does not define what is meant by the phrase “lawful network management protocol,” nor does it spell out exactly what types of services the licensee can manage – or the extent to which the

¹¹⁷ MetroPCS also submits that the free service cannot be segregated from the premium services. Otherwise, the licensee can limit services, coverage, and up time without affecting its revenues.

¹¹⁸ *FNPRM*, at p. 22, proposed rule Section 27.1193(b)(1).

¹¹⁹ *Id.* at p.17, proposed rule 27.16(b). This is especially problematic given that estimates place a substantial amount of Internet usage as P2P applications.

¹²⁰ *Id.* at p. 21, proposed rule 27.1191(a)(2).

licensee can do so. For instance, can the licensee limit applications which run on the “free” service – *e.g.*, limit the browser that can be used to a particular browser? Such questions should be answered by the Commission in the negative, as the free service should provide consumers with the full range of applications that the Internet has to offer. The Commission must adopt rules that state for certain that the concept of the free wireless broadband network does not allow a licensee to present only a portion of the Internet, with the full Internet available only for a fee. Rather, the Commission must establish rules to ensure that the licensee is not able unreasonably to restrict applications on the free service, and that the full Internet with all applications should be available.¹²¹

If the Commission does not adjust its proposed rules as advocated by MetroPCS below, it must define exactly what the term “lawful network management protocol” means. Leaving this term vague may allow the licensee to degrade and substantially limit the use of the “free” service. Rather, the Commission should require that the licensee provide updates and notices to users whenever there is congestion in the free network, and provide monthly reports to the Commission regarding usage data, so that the Commission can monitor how the licensee is managing the network and can ensure that the free wireless broadband service is robust. The licensee should also include in this monthly report to the Commission a disclosure of each time that the licensee has restricted applications via its “lawful network management protocol,” so that the Commission can ensure that the licensee is not unnecessarily restricting access to the free service. And, as stated earlier, the Commission also must adopt rules that will provide for an Internet experience that is comparable, with the exception of speed, to any fee-based service offered by anyone over the AWS-3 spectrum.

¹²¹ MetroPCS believes, as noted below, that any “open access” conditions placed on the AWS-3 spectrum should remain consistent across both the free and the fee-based services provided over the spectrum.

As a further matter, there is nothing in the proposed rules regarding the regulation of equipment availability or prices. The proposed rules do not address whether customer-premises equipment and/or handsets may be included in the “free” offering. In fact, the proposed rules specifically state that “. . . the compensation paid for broadband service does not include any compensation paid for user/customer equipment.”¹²² This means that the rules would not appear to preclude the licensee from solely renting equipment to consumers. That could certainly be a way to evade truly “free” service. Thus, MetroPCS proposes that any licensee providing free service must furnish at least one industry-standard air interface card that can be purchased at a commercially-reasonable price, with technical standards and open architecture to ensure that all manufacturers that want to construct and sell units that can be used on the service can do so. In addition, the Commission should clarify that the licensee and its affiliates may not rent equipment for the use of the “free” wireless broadband services.

2. How is the 25% Capacity for the “Free” Wireless Broadband Service to be Measured?

The Commission must also spell out specific rules regarding the “up to 25%” of capacity that needs to be used to provide the “free” wireless broadband network. Allowing the licensee to self-determine the manner in which it will measure the 25% of capacity, as well as allowing the licensee to determine when it can restrict applications and services on the free wireless broadband service, would enable the licensee to game the system by degrading its free service in order to promote customer migration to its fee-based service.

As an initial matter, the Commission must revise its proposed rule that allows the licensee to use more than 75% of its capacity for premium services in some instances. The Commission’s proposed rules state that

¹²² *FNPRM*, at p. 21, proposed rule Section 27.1191(b)(3).

“[o]n a per base-station or per market basis, a 2155-2180 MHz licensee will not be required to maintain the minimum data rate when and where meeting additional demand for the free broadband service would require more than twenty-five percent of wireless network capacity. Once demand reaches twenty-five percent of wireless network capacity, a 2155-2180 MHz licensee has the discretion to manage any additional demand for free service using any lawful network management protocol.”¹²³

In effect, a licensee may “utilize *more than seventy-five percent* of its wireless network capacity for any other service authorized to operate in this band”¹²⁴ if it meets the demand and speed requirement for the “free” service.

This would create an exception wide enough for a truck to plow through, especially in light of the rule allowing the licensee to manage demand using “any lawful network management protocol.” The Commission would be empowering the licensee to degrade and limit its “free” service in every way possible. This could include a licensee creating a poor-quality free service that would be purposely designed to attract and retain as few users as possible – while using all of its resources for a fee-based service. For example, what would prevent a licensee from providing a skeleton service with low-end service and poor building penetration in order to dissuade users from using the free offering? It would be in the licensee’s best interest to generate as little demand for the free service as possible, so that it could utilize as much capacity as possible for its more lucrative fee-based services. The Commission can eliminate this incentive by using the 25% capacity benchmark as a floor, rather than a cap, on the provisioning of the free service. This requirement would encourage the licensee to maintain a robust free

¹²³ *FNPRM*, at p. 21, proposed rule Section 27.1191(b)(2).

¹²⁴ *Id.* at p. 21, proposed rule Section 27.1191(b)(1) (emphasis added).

wireless broadband service, without having to compete for capacity with the licensee's fee-based service.¹²⁵

In addition, as the Commission is aware, the capacity of a block of spectrum is highly variable, depending upon system design. There are numerous different ways for a licensee to measure or manipulate the capacity of its system. The Commission must establish rules to ensure that the licensee is fairly allocating the available engineered capacity of its entire network as between the required free wireless broadband service and the fee-based service. Specifically, the Commission should establish rules for how and how often system capacity must be measured by the AWS-3 licensee to assure that the free service obligation is being fully and accurately fulfilled. The Commission must ensure that a licensee cannot calculate the 25% at particular times of the day that are beneficial to it – such as during particularly low-usage hours or times of the day. The Commission must also ensure that the 25% is not clogged with Internet advertising sold or generated by the licensee and that is not requested by the user. Rather, the Commission must require that the licensee measures its capacity on a neutral, consistent, network-wide basis, and without allowing content or advertising not requested by the user to count towards the fulfillment of the 25% obligation.

Furthermore, it is unclear whether the AWS-3 licensee can subdivide its block of spectrum and develop a premium system on 3/4ths of the spectrum with high capacity and throughput, while relegating the remaining 25% of the spectrum to a lower-capacity system with limited capabilities. As has been observed earlier, it also appears that there is nothing in the proposed rules that would prevent the licensee from offering reduced-service coverage or

¹²⁵ Further, the Commission must ensure that customers that roam will be served from adjacent transmit/receive sites. Accordingly, the Commission should ensure that the licensee reserves capacity on each site for free roaming. Finally, the Commission should establish a rule that free service customers get priority over fee-paying users when more than 75% of the capacity is being used by the fee-based service.

degraded building penetration to the free tier in order to incentivize customers to purchase its premium service. It is also not clear that the AWS-3 licensee cannot allocate capacity for the free service in such a way as to have greater capacity in places where no demand exists, and less capacity in locations where significant demand exists. The Commission must implement rules to ensure that neither of those scenarios will occur. The Commission must propose rules that require the AWS-3 licensee to maintain a free service that is as robust, and that reaches the same population and the same numbers of areas, as any fee-based service provided over the network. MetroPCS thus proposes that the Commission mandate that signal strength at any point in the market for the free service be equal to or better than signal strength at the same point for any fee-based service.

3. How Will the Speed of the Free Wireless Broadband Service be Measured?

The Commission has left unresolved numerous questions regarding how the speed of the network will be calculated. The Commission proposes that the licensee provide a free service that “. . . must utilize up to twenty-five percent of its AWS-3 wireless network capacity to provide free two-way wireless broadband Internet access (“free broadband service”) at a minimum engineered data rate of 768 kbps downstream per user.”¹²⁶ However, the *FNPRM* does not specify how the speed of the free wireless broadband Internet service will be calculated. In addition, the *FNPRM* does not take into account a situation in which additional information not requested by the user, such as pushed advertising, is conveyed along with any requested information, and whether in that situation that would detract from the speed of the free service.

¹²⁶ *FNPRM*, at p. 21, proposed rule Section 27.1191(b). One point to be considered is that the existing 3G and 4G data services being deployed by wireless operators are operating at speeds that are many multiples faster than the Commission’s proposed speed, as are wireline competitors. The Commission should consider whether the minimum required data rate for the AWS-3 spectrum should be 1.5 or 3.0 Mbps in order to have any hope of being competitive with the current providers whose systems will become even faster over time.

Moreover, the Commission does not appear to take cognizance of any delay that may be imposed by its mandatory filtering requirements, discussed in Section III.D. of these Comments, below, and how such delay would be taken into account in determining the speed of the free service.

It is unclear under the proposed rules whether a licensee will be required to ensure that all users of the network are able to reach the Internet at the specified speed on a regular basis – or whether the licensee would be allowed to satisfy the throughput requirement in a manner where the required minimum speed can only be reached under optimal conditions that may not often exist, or only in the “air” portion of the network. The *FNPRM* also does not consider to what extent the licensee will be able to utilize speed averaging rather than assuring that users of the free service tier will enjoy, at a minimum, the speeds that the band is designed to enable. The Commission must provide answers to these questions in order to ensure that all users of the free service are able to enjoy the minimum broadband speed of 768 kbps. MetroPCS proposes that speed be measured using an “end-to-end” test (*e.g.*, measured from the user to the Internet) – to ensure that end-users of the network will receive data at a minimum network speed of 768 kbps on whatever device they are using to access the network, and that the AWS-3 licensee be obligated to build each portion of its network so as to achieve the same data rate between the free service and the paid service.

4. Are the Premium Services Subject to Non-Discrimination Requirements?

Another issue unaddressed by the Commission in the *FNPRM* is whether it will impose non-discrimination requirements upon the AWS-3 licensee. Since the Commission has classified high-speed broadband as non-CMRS, the licensee arguably can discriminate unreasonably in prices and in other terms and conditions of service, for example, by refusing to provide service to certain categories of users. The Commission needs to consider whether it should impose a non-discrimination requirement on the licensee to ensure that all Americans have the right and the

ability to use this valuable spectrum on a reasonably undifferentiated basis. Of course, if the Commission should conclude, as it must, that it does not have the authority under the Act to regulate rates (and thus that it cannot impose a free service obligation), then the non-discrimination obligation would not encompass rates. However, to the extent that the Commission may wrongfully conclude that it has rate authority over the AWS-3 services, then it should require the AWS-3 licensee to offer any fee-based AWS-3 services at reasonable, non-discriminatory rates. The Commission cannot take the approach that it has rate authority to impose a free-service requirement, but that it does not have the authority to regulate rates generally, without subjecting itself to a substantial legal challenge that such approach is arbitrary and capricious. And there is no doubt that since the Commission wants to ensure that AWS-3 provides an additional pipe to the home, the AWS-3 licensee should not be able to ignore well-established regulatory principles that such services must be offered on a non-discriminatory basis, at just and reasonable rates.¹²⁷

D. The Vague Requirement for “Always-on” Content Filtering Does Not Pass Constitutional Muster

MetroPCS has significant concerns regarding the legality of the proposed “always-on” content filtering that the Commission has proposed for the free wireless broadband service. MetroPCS agrees with various commenters, including the American Civil Liberties Union and the Public Interest Spectrum Coalition, which elucidate why such “always-on” filters would be unconstitutional.¹²⁸ Once again, the content filtering requirement appears to have played a major

¹²⁷ M2Z and others may argue that the AWS-3 licensee should operate under the same regulatory framework as other broadband services. However, since the AWS-3 licensee will be receiving a considerable benefit by a *de facto* reduced price for the license, it should have an obligation to provide its services on a non-discriminatory basis.

¹²⁸ See Comments of the American Civil Liberties Union, WT Docket No. 07-195 (filed June 5, 2008); *Ex Parte* Comments of the Public Interest Spectrum Coalition, WT Docket No. 07-195 (June 5, 2008).

role in the Commission’s decision to favor the M2Z proposal, and it would be patently unfair for M2Z ultimately to get the license it seeks free of this requirement. The bad idea of creating a designer allocation becomes even worse if the entity for which the allocation was specially tailored gains access to the spectrum without having to meet public interest requirements that were at the core of the allocation.

The Commission’s proposed rules specify that the content filtering requirements that it is threatening to impose upon the free wireless broadband service “. . . must be active at all times on any type of free broadband service offered to customers or consumers through an AWS-3 network.”¹²⁹ However, these rule proposals ignore the fact that private speech, including speech that is delivered through government-sponsored programs that create a “designated public forum” intended to serve as a conduit for the exchange of viewpoints, may not be prohibited by the government on the basis of content without passing a “strict scrutiny” examination under the First Amendment to the United States’ Constitution. Because the proposed filtering requirement at issue does not appear to be narrowly tailored to achieve a compelling governmental interest, it is likely to be held unconstitutional.

Content-based restrictions on otherwise-protected speech can stand only if they satisfy strict scrutiny, which means that those restrictions must be narrowly tailored to promote a compelling government interest.¹³⁰ For adults, sexual expression that is indecent but that is not obscene is protected by the First Amendment.¹³¹ In crafting regulations to shield children from exposure to indecent materials that are protected by the First Amendment, “. . . the government

¹²⁹ *FNPRM*, at p. 22, proposed rule Section 27.1193(a)(1).

¹³⁰ *Reno v. American Civil Liberties Union*, 521 U.S. 844 (1997) (“*Reno*”); *Sable Communications of California, Inc. v. Federal Communications Commission*, 492 U.S. 115 (1989) (“*Sable*”).

¹³¹ *Reno*, 521 U.S. at 874; *Sable*, 492 U.S. at 126.

may not ‘reduce the adult population . . . to . . . only what is fit for children.’”¹³² Restrictions on speech that are limited in their application to sexually-explicit or otherwise indecent material are “content-based.”¹³³

Courts apply a particularly strict standard in evaluating whether content-based restrictions on speech are tailored narrowly enough to pass constitutional muster. In *Reno*, the Supreme Court struck down portions of the Communications Decency Act that prohibited (1) the knowing transmission of obscene or indecent messages to recipients of less than 18 years of age, and (2) the knowing sending or displaying of patently-offensive messages in a manner that was available to a person under 18 years of age.¹³⁴ In so doing, the Court recognized that there is a governmental interest in protecting children from harmful materials, but also observed that such interests do not justify an unnecessarily-broad suppression of speech addressed to adults.¹³⁵ Since the ban in *Reno* reached materials that were indecent but not obscene (and that were thus protected by the First Amendment), the Court concluded that there was an “overarching commitment” to make sure that Congress had designed its statute “. . . without imposing an unnecessarily great restriction on speech.”¹³⁶

When evaluating the potential First Amendment overbreadth of a statute, the Court looks to factors that may be tailored to the medium of expression at issue, and imposes a burden upon the government to demonstrate that a less-restrictive alternative would not be plausible. In *Reno*, the Court accepted a district court’s categorical findings that there were no feasible methods for

¹³² *Sable*, 492 U.S. at 128.

¹³³ *United States v. Playboy Entertainment Group, Inc.*, 529 U.S. 803, 811 (2000).

¹³⁴ *Reno*, 521 U.S. at 859-60.

¹³⁵ *Id.* at 875.

¹³⁶ *Id.* at 874, 876 (quoting *Denver Area Ed. Telecommunications Consortium, Inc. v. FCC*, 518 U.S. 727 (1996)).

determining the age or the identity of a user accessing material through e-mail, newsgroups, or chat rooms.¹³⁷ To that extent, the Court found that it would be impossible to restrict children’s access to these materials without also curtailing the access of adults.¹³⁸ Because the scope of the prohibition was not limited to commercial speech or entities, but rather embraced non-profit entities and individuals posting or displaying indecent messages, and because the terms “indecent” and “patently offensive” covered large amounts of non-pornographic material with serious educational or other value, the Court held that the government had an especially-heavy burden to explain why a less-restrictive provision would not have been as effective.¹³⁹ In particular, the *Reno* Court pointed to the district court’s finding that “. . . [d]espite its limitations, currently available *user-based* software suggests that a reasonably effective method by which *parents* can prevent their children from accessing sexually explicit and other material which *parents* may believe is inappropriate for their children will soon be widely available.”¹⁴⁰ In the absence of detailed findings by Congress that no less-restrictive alternative existed, the Court found the Communications Decency Act to be overbroad.¹⁴¹

MetroPCS respectfully submits that the Commission’s proposed filtering requirement is likely to be considered an overbroad restriction on protected speech. In the first instance, a court would likely consider such filtering to be “content-based,” since the filtering is designed to eliminate user exposure to material deemed to be obscene or pornographic or otherwise harmful to teenagers and adolescents. Further, the method by which this speech is to be regulated is very

¹³⁷ *Reno*, 521 U.S. at 855-56, 876.

¹³⁸ *Id.*

¹³⁹ *Id.* at 877-79.

¹⁴⁰ *Id.* at 877 (quoting *American Civil Liberties Union v. Reno*, 929 F. Supp. 824, 842 (E.D. Pa. 1996) (emphasis added by the Supreme Court)).

¹⁴¹ *Id.* at 879.

similar in material respects to the situation that the Supreme Court addressed in *Reno*. Like the provisions of the Communications Decency Act at issue in that case, the Commission proposal could potentially block the legitimate communication of non-obscene materials between adults—indeed, the Commission’s proposal is even more onerous than the Communications Decency Act’s restrictions, inasmuch as the *FNPRM* would explicitly prevent *all* such transmissions, and not just those that could be received or seen by children. In addition, the proposed rules would specifically allow the licensee to limit access to particular types of communications such as to peer-to-peer file sharing to its free service. This additional limitation makes the content filtering at issue here particularly overbroad, as it would allow the licensee to block entire categories of communications, regardless of whether obscene or pornographic content is actually contained in such communications. This also may run afoul of the users’ First Amendment rights, since protected speech would be curtailed if distributed via peer-to-peer networking.

Thus, the Commission’s proposed content filtering rules would most likely be held by the courts to be unconstitutional under Supreme Court precedent.¹⁴² The proposed filtering requirement that is to be imposed upon a licensee which must provide free wireless broadband service does not appear to satisfy constitutional muster, as it is not narrowly tailored to satisfy the strict-scrutiny standard; the mandatory filters would block adult access to communications that are otherwise protected by the First Amendment, and there does not appear to be any showing that the filters themselves are the least restrictive means of achieving the governmental

¹⁴² If the Commission were to proceed to apply an “always-on” content filtering requirement for the AWS-3 spectrum, it should determine ahead of time what would happen if the content filtering requirement ultimately is struck down by the courts. For example, should the original licensee retain the spectrum, or would the license be deemed cancelled with a new auction to be held? MetroPCS favors the latter approach, since it would encourage bidders to value the spectrum realistically and would not reward speculators who are willing to take a higher legal risk by bidding on the spectrum, even though the spectrum is burdened by the constitutionally-uncertain filtering obligation, and gambling on the outcome of the near-certain First Amendment challenges that will follow.

interest at stake. Further, the *FNPRM*'s provision that a licensee could prohibit peer-to-peer communications could also run afoul of the First Amendment by limiting protected speech. Since content filtering for free services is one of the most important policy objectives embedded in this proposed allocation, the failure of that element should cause the Commission to revisit the entire allocation.

E. Safeguards Are Necessary to Ensure that AWS-3 Services Serve the Public Interest

1. A Substantial Reserve Price, and Either a Letter of Credit or a Performance Bond, Is Required

Based upon the failures of Frontline and NextWave, the Commission should be concerned that licensees of nationwide spectrum or near nationwide spectrum¹⁴³ may prove not to have the financial, technical, and operational resources to build and operate a nationwide system. The Commission therefore should establish a reserve price for any nationwide allocation of AWS-3 spectrum, in order to ensure that the winning bidder will have evidenced a seriousness of purpose and has a substantial stake in promptly developing the services contemplated by the Commission. A reserve price, based upon the prices paid in the AWS-1 auction, would make sure that the objective of Section 309(j)(3) of the Act of allowing the public to recoup a fair value for scarce radio spectrum that is sold at auction will have been satisfied. In addition, the Commission should impose other mechanisms for any nationwide licenses, such as a letter-of-credit or bond requirement, in order to make certain that valuable spectrum is not devoted to an unfunded business plan which could result in spectrum becoming tied up in bankruptcy or otherwise lying fallow. Those are the only ways to be confident that the public-policy objectives underlying the allocation are in fact achieved. This is especially necessary since, if the initial

¹⁴³ Although the spectrum purchased by NextWave was not assigned as a nationwide license, the scope of the licenses it bought essentially created nationwide build-out obligations.

licensee should fail, it is unlikely that another will emerge to acquire the spectrum and build the desired system.

The Commission must establish a meaningful reserve price for any auction of AWS-3 spectrum, so that the winning bidder has a substantial stake in promptly bringing to market the services contemplated by the Commission, as well as to protect the value of a significant and scarce public resource. Indeed, Section 309(j)(3) of the Act requires the Commission to balance several statutory objectives and empowers the Commission to use reserve prices to achieve those objectives.¹⁴⁴ A meaningful reserve price generally will require an AWS-3 bidder to establish a solid business plan and to test that plan in the capital markets, a publicly-beneficial vetting process. For example, in the case of Frontline and the 700 MHz D Block, the fact that Frontline was required to raise a significant amount of capital just to participate in the auction and to win the license served to expose the problems with its business plan sooner rather than later. Had no such upfront payments been required, the Commission could have found itself in another nightmare scenario, reminiscent of the NextWave debacle, where valuable spectrum would have been licensed to a bidder that was unable to meet the funding and building requirements, leaving the spectrum to lay fallow for an extended period of time due to the bankruptcy of the licensee.¹⁴⁵ The Commission should establish a reserve price here, in order to determine if the capital markets are willing to fund and support the type of unprecedented business plan for which the Commission is developing rules in the AWS-3 band. Although this would not

¹⁴⁴ 47 U.S.C. § 309(j)(7)(A).

¹⁴⁵ The Commission's current auction rules limit its financial exposure to a licensee's bankruptcy. However, it is unclear whether the Commission will be able to revoke a license from a bankrupt licensee who fails to meet license build-out requirements, especially if the license is the largest asset in the bankrupt's estate. At a minimum, Section 362 of the Bankruptcy Code may require the Commission to get an order from the bankruptcy court to revoke the license, and there can be no assurance that the Commission would be able to obtain such an order.

guarantee success, it would at a minimum give the Commission some comfort that others (namely, investors and financial markets) have enough faith in the business plan to back it.

The Commission has a statutory obligation to ensure that the public receives fair value for this scarce public resource. The AWS-3 spectrum has “. . . been valued at anywhere from \$1.5 to \$5.3 billion.”¹⁴⁶ Indeed, an analysis from the Phoenix Center recently valued a 25 MHz AWS-3 block at approximately \$2.8 billion, if the license did not come with substantial conditions upon it.¹⁴⁷ At the very least, the Commission should set a reserve price for this valuable spectrum at no less than \$1.5 billion - - a value based upon the AWS-1 auction - - to guard against having a scarce public resource being given away in order to help subsidize a risky, unproven business plan.

In addition, MetroPCS believes that it is essential for the Commission to ensure that any AWS-3 winner has the financial wherewithal to meet the Commission’s requirements for the build-out of a free nationwide wireless broadband network. To do so, the Commission must use the regulatory tools that it has developed in the past to guarantee performance. Specifically, the Commission should impose either a letter-of-credit or a performance bond requirement upon any winner of the encumbered AWS-3 spectrum, as well as establish a substantial payment default penalty, in order to ensure that this valuable spectrum is not devoted to an unfunded business plan which could result in spectrum becoming hostage to a licensee bankruptcy or otherwise remaining undeveloped. If the Commission should determine that a free wireless broadband network is necessary, it must be confident that the winning bidder is financially viable. The

¹⁴⁶ *Ex Parte* Letter from Steve Largent to Chairman Kevin J. Martin, *et al.*, WT Docket Nos. 04-356, 07-195 (filed June 25, 2008).

¹⁴⁷ “Report: AWS-3 License Would Fetch \$2.8B Without FCC’s Conditions,” *Fierce Broadband Wireless*, June 25, 2008. The \$2.8 billion was arrived at by an analysis of the results of prior auctions in the AWS band and the recently-concluded 700 MHz auction.

Commission must be convinced that adequate funds are available for the build-out of this network. These proposed safeguards would ensure that the finances for the building of a free wireless broadband network are in place or committed to the enterprise.

The Commission previously has used both letters of credit and performance bonds to ensure that licensees will satisfy their license commitments. For instance, in its 800 MHz rebanding order, the Commission required Nextel to obtain a letter of credit to make certain that the promised nationwide band reconfiguration would occur, regardless of any changes in Nextel's financial condition.¹⁴⁸ The Commission sought comment in the 800 MHz rebanding proceeding “. . . on how to guarantee the availability of funding to complete the reconfiguration of the 800 MHz Band regardless of the financial status of the contributing party or parties.”¹⁴⁹ The Commission determined that a letter of credit would best accomplish that guarantee, and required Nextel to provide an irrevocable letter of credit securing \$2.5 billion to serve as the funding source for the costs involved in reconfiguring the 800 MHz band.¹⁵⁰ The Commission did not consider sufficient Nextel's bare promise to fund the rebanding, even if such promise were an enforceable term of its license. The Commission should insist upon no less here.

The Commission also has insisted upon performance bonds in at least two other instances. First, for the construction of paging systems at 929-930 MHz, the Commission

¹⁴⁸ See *Improving Public Safety Communications in the 800 MHz Band, et al's* Report and Order, Fifth Report and Order, Fourth Memorandum Opinion and Order, and Order, 19 FCC Rcd. 14969 (rel. Aug. 6, 2004).

¹⁴⁹ *Id.* at para. 180.

¹⁵⁰ *Id.* at para. 182.

mandated performance bonds when slow-growth extensions were requested.¹⁵¹ The Commission stated that

[t]he applicant must also provide a construction cost estimate and must either place a sum equal to that estimate in an escrow account or obtain a performance bond payable in that amount. As construction of the system proceeds, the licensee may draw from the escrow amount or reduce the bond amount to reflect costs incurred. If the licensee fails to construct all or part of the proposed system within the slow-growth period, the escrow balance or the outstanding principal on the bond will be paid to the United States Treasury.¹⁵²

More recently, the Commission mandated performance bonds for satellite licenses issued after September 20, 2004 (with certain minor exceptions).¹⁵³ Under these satellite license rules, licensees were required to post bonds within 30 days of the grant of their licenses, and failure to post such a bond would render the license null and void.¹⁵⁴ The licensee would be considered in default and would lose the bond (with the bond funds going to the U.S. Treasury), if it failed to meet particular construction milestone requirements.¹⁵⁵ Licensees were permitted to reduce the amount of the bond, upon meeting certain milestone requirements.¹⁵⁶ The Commission noted that by “. . . requiring satellite licensees to make a financial commitment to construct and launch their satellite, we help deter speculative satellite applications, and help expedite provision of service to the public” and that “. . . replacing our current financial qualification requirement with

¹⁵¹ *Amendment of the Commission’s Rules to Provide Channel Exclusivity to Qualified Private Paging Systems at 929-930 MHz*, Report and Order, 8 FCC Rcd. 8318, at para. 23 (rel. Nov. 17, 1993).

¹⁵² *Id.*

¹⁵³ *Amendment of the Commission’s Space Station Licensing Rules and Policies, et al’s*, First Report and Order and Further Notice of Proposed Rulemaking, 18 FCC Rcd. 12674, at paras. 170-172 (rel. May 19, 2003); 47 C.F.R. § 25.165.

¹⁵⁴ *Id.* at para. 170.

¹⁵⁵ *Id.*

¹⁵⁶ *Id.*

a bond requirement will result in the financial community determining whether the licensee is likely to construct and launch its satellite system. Thus, financial qualifications will become a market-driven rather than a regulatory determination."¹⁵⁷

By applying a letter-of-credit and/or a performance bond requirement to the encumbered AWS-3 block winner in an amount sufficient to cover the cost of acquiring the license, building out the network and initially operating the network, the Commission will ensure that its objective of establishing a free nationwide wireless broadband network will not be sacrificed in the event that the AWS-3 winner should falter. Rather, by having to post a substantial letter of credit or a substantial performance bond, the AWS-3 winner will be demonstrating that it has the financial capability to satisfy the license requirements. This will enhance the likelihood that the applicable build-out obligations are met and that the wherewithal of the potential bidders will be tested and cleared by market forces.

In that vein, the Commission should also establish a significant default payment for any encumbered AWS-3 block winner. The default amount should be substantial enough to deter frivolous bids on the AWS-3 block, as well as to further ensure that any AWS-3 winner has a seriousness of purpose in fulfilling the Commission's objectives.

2. Any "Open Access" Requirements Should Be Consistent Across Both the Free and Fee-Based Services

In the *FNPRM*, the Commission proposes to apply different "open access" requirements to the free and the fee-based services that the AWS-3 block winner may provide. In the Commission's proposed rules, the *FNPRM* notes that ". . . the licensee offering premium or paid services on the AWS-3 band subject to this section shall not deny, limit, or restrict the ability of their customers to use the devices and applications of their choice on the licensee's network, and

¹⁵⁷ *Id.*

the licensee providing free broadband service on the AWS-3 band subject to this section shall not deny, limit, or restrict the ability of their customers to use the devices of their choice on the licensee's network. . .”¹⁵⁸ Thus, the Commission is proposing open applications and devices for the fee-based service, while proposing open devices only (not applications) for the free service.

MetroPCS submits that any open access requirements applied to the AWS-3 licensee be applied on a consistent basis to both the free and the fee-based portions of the band.¹⁵⁹ The Commission should not allow certain applications to be blocked or degraded on the free network, just so the licensee can provide such services over its fee-based network in order to enhance the attractiveness of the latter over the former. Allowing that type of discrepancy, particularly if the Commission were to allow a licensee to use over 75% of its capacity for its fee-based service, would increase both the licensee's incentive and ability to drive users from the free service to the paid one. It would allow the licensee potentially to restrict applications, in order to limit the capacity on its free service while simultaneously providing more capacity on its fee-based services. The Commission must guard against the licensee being able to engage in such gamesmanship. If the Commission takes this path, its objective goal should be to provide unfettered access to the Internet for free -- not to allow severely restricted access. The mandated “free” service should not be used as a sampler platter to entice consumers to pay for premium services. Rather, consumers using the “free” wireless broadband service should have the same rights as users of any fee-based services.

¹⁵⁸ *FNPRM*, at p. 17, proposed rule Section 27.16(b).

¹⁵⁹ MetroPCS reiterates its opposition to mandated open-access requirements upon wireless spectrum. However, if the Commission does elect to mandate such requirements, it should not allow a provider to limit applications in order to provide a watered down version of the Internet experience for its free service, while allowing all applications for its fee-based service. This is especially true, as some equipment may be designed solely to run applications in the free service - - *e.g.*, some such equipment may not be general-purpose devices, but rather specialized devices using particular software applications.

3. Build-out Requirements for any Free Wireless Broadband Service Must Promote Nationwide Service

MetroPCS believes that the Commission should establish robust population-based build-out requirements for any nationwide license, including for nationwide spectrum dedicated to the free wireless broadband network. In the *FNPRM*, the Commission seeks comment on its proposed build-out requirements for the AWS-3 band, which would “. . . [r]equire the licensee to provide signal coverage and offer service to: 1) at least 50 percent of the total population of the nation within four years of commencement of the license term and 2) at least 95 percent of the total population of the nation at the end of the 10-year license term.”¹⁶⁰ However, while not noted in the text of the *FNPRM*, the proposed rules also allow the licensee of the AWS-3 band to opt for an alternate, lower build-out specification. Proposed rule Section 27.14(q) states that “. . . [i]f any licensee in this band elects not to meet its performance requirements based on the percent of the U.S. population served, it shall provide signal coverage and offer service to at least 35 percent of the population in each Cellular Market Area (CMA) or Economic Area (EA) in its licensed area within four years and at least 70 percent of the population in each CMA or EA in its licensed area at the end of the license term.”¹⁶¹

As an initial matter, MetroPCS supports population-based, rather than geography-based, build-out requirements. However, since nationwide population-based requirements may allow a licensee to meet the requirements by covering a very small proportion of the geography having a disproportionately high population density, a more robust population-based standard is appropriate. Accordingly, the Commission should not allow an AWS-3 licensee to opt not to comply fully with the nationwide build-out requirements. Allowing such an opt-out would

¹⁶⁰ *FNPRM*, at para. 3.

¹⁶¹ *Id.*, at p. 14, proposed rule Section 27.14(q).

enable the AWS-3 licensee to cherry-pick the geographic areas it chooses to serve, and would completely undermine the Commission's objective to foster a free nationwide wireless broadband network. Further, since this network will be non-traditional, requiring a broad-based build-out will increase the likelihood that there will be a sufficient market potential for affordable mobile devices to be developed. The Commission's build-out requirements therefore must ensure that a truly nationwide network will be built, and that smaller and rural areas will not be left out.

Accordingly, MetroPCS submits that the Commission should adopt the following build-out requirements for a nationwide license in the AWS-3 band (this language would replace the current language in proposed rule Section 27.14(q)):

Any AWS licensee holding an authorization in the 2155-2180 MHz band shall provide signal coverage and offer service to at least 50 percent of the total U.S. population within four years of the date on which the original license was issued, and at least 95 percent of the total U.S. population at the end of the license term. In addition, any AWS licensee holding an authorization in the 2155-2180 MHz band shall provide signal coverage and offer service to at least 35 percent of the population in each Cellular Market Area (CMA) or Economic Area (EA) in its licensed area within four years, and at least 70 percent of the population in each CMA or EA in its licensed area at the end of the license term.

These requirements would make it possible for the Commission to achieve its objective of the build-out of a genuinely nationwide wireless broadband network, not a network serving only discrete, favored pockets of high-population density selected by the licensee, and they are highly appropriate for a nationwide license, as the purpose of such a license is to provide for service in all areas of the country – not just the potentially-lucrative or easy-to-serve areas.

4. The Commission Should Not Allow the AWS-3 Licensee to Delegate Away the Free Service Obligation

MetroPCS also proposes that the Commission not allow disaggregation of the AWS-3 spectrum that would allow a separation of the free service obligation from any fee-based services

provided over the spectrum. The Commission must ensure that the free service obligation, at whatever minimum capacity the Commission ultimately decides to establish, applies to the entire AWS-3 spectrum band, so that a nationwide wireless broadband service will be provided in a reasonable time frame. The Commission cannot allow a licensee to rid itself of its obligation to offer a free service in a particular area, or to disaggregate the free portion of the network from the fee-based portion.

IV. THE COMMISSION SHOULD SET SERVICE RULES FOR THE 1915-1920 MHZ AND 1995-2000 MHZ BANDS (H BLOCK) THAT PROMOTE COMPETITION IN THE WIRELESS INDUSTRY

In the *FNPRM*, the Commission also proposes to “. . . adopt application, licensing, operating, and technical rules for the 1915-1920 MHz and 1995-2000 MHz bands (H Block).”¹⁶² MetroPCS applauds the rules proposed by the Commission for the H Block (with one exception, as noted below), because these rules will promote competition in the wireless marketplace and will allow sufficient flexibility for the spectrum to be put to its highest and best use.¹⁶³

A. The Commission’s Allocation of the H Block in BTAs Will Allow for a Robust, Competitive Auction

Licensing the H Block using Basic Trading Areas (“BTAs”)¹⁶⁴ will allow for an auction that includes as many fungible licenses as possible, with licensees being accorded flexibility as to what services they will provide. By offering licenses in smaller geographic areas, the Commission would allow bidders to take a “building block” approach that would permit meaningful participation in the auction by a more diverse group of carriers – including smaller

¹⁶² *FNPRM*, at para. 4.

¹⁶³ In addition, as noted in Section V below, MetroPCS believes that these same rules should apply to an auction of an unencumbered paired J Block, as well.

¹⁶⁴ *FNPRM*, at para. 4.

carriers and prospective and new entrants into the marketplace.¹⁶⁵ Such an approach would allow bidders who desire larger license areas to aggregate licenses into larger geographic areas, as aptly demonstrated by numerous entities in the AWS-1 auction.¹⁶⁶ MetroPCS also agrees with the Commission's proposed rule for license terms, with an initial term of 10 years and subsequent renewal terms of 10 years.¹⁶⁷

MetroPCS additionally submits that if the Commission should decide - - as it ought - - to remove the 5 MHz J Block from the AWS-3 allocation, and retain the two paired 10 MHz H and J Blocks, it should auction both the J Block and the H Block in the same auction.¹⁶⁸ By offering to sell a series of potentially substitutable licenses in a single auction, the Commission would ensure that the market, and not artificial regulatory policies, would establish the value of such licenses and would determine the winners and the losers. When multiple fungible licenses are involved in an auction, more bidders are attracted and their ability to move bids around among and between substitutable licenses allows a market-based equilibrium to be reached. In contrast, when isolated licenses are sold on a "one-off" basis, fewer applicants are likely to participate, resulting in a less robust auction. As a result, there is a risk that the licenses will not be sold for their true market value and often will not be acquired by the bidders who value them most highly.¹⁶⁹ In addition, the Commission should heed a main conclusion in a report that it issued

¹⁶⁵ MetroPCS *700 MHz FNPRM* Comments, at pp. 13-14.

¹⁶⁶ *Id.* at p.14.

¹⁶⁷ *FNPRM*, at para. 4.

¹⁶⁸ MetroPCS also submits that the J Block should be allocated using BTAs, just like the H Block, to create more fungible licenses in the same auction.

¹⁶⁹ This especially true in light of the chilling effect of the Commission's anti-collusion rule, which forces interested parties often to choose between participating in an auction or engaging in discussions that may run afoul of the anti-collusion rule. The smaller the number of licenses to be auctioned, the greater the likelihood that this choice will be decided in favor of not participating.

15 years ago and that set forth the roadmap for a transition to the use of a market mechanism for the allocation of spectrum, which stated that “. . . [a]n ideal market allocation should impose no restrictions on spectrum uses and users beyond those necessary to limit interference, to prevent anti-competitive concentration, and to comply with international agreements.”¹⁷⁰ Bearing this principle in mind, the Commission should allow for a flexible auction of both the H and the J Blocks, consisting of as many fungible units as possible.

B. The Commission Should Clarify the Performance Obligations for the H Block

MetroPCS proposes that the Commission make a clarification with regard to its proposed performance requirements for the H Block. The Commission should clarify the portions of the proposed rules which indicate that a licensee may be subject to monetary fines and supplemental license forfeitures for a failure to meet Commission performance requirements. These are the same changes that MetroPCS proposed in its Petition for Clarification and Reconsideration of the Commission’s 700 MHz Order.¹⁷¹ MetroPCS requests that the Commission make clear the circumstances in which licensees would be at risk of being subjected to monetary fines and supplemental license forfeitures for a failure to meet Commission performance requirements.

The Commission’s proposed performance requirements for the H Block contain language indicating that the Commission may impose additional sanctions, including fines and further

¹⁷⁰ Kwerel, Evan and Williams, John, *A Proposal for a Rapid Transition to Market Allocation of Spectrum*, OPP Working Paper 38, Federal Communications Commission at pp. 3-4, November 2002.

¹⁷¹ See “Petition of MetroPCS Communications, Inc. for Clarification and Reconsideration,” filed September 20, 2007 in *Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, et al.*, WT Docket No. 06-150, CC Docket No. 94-102, WT Docket No. 01-309, WT Docket No. 03-264, WT Docket No. 06-169, PS Docket No. 06-229, WT Docket No. 96-86, and WT Docket No. 07-166, Order, FCC 07-132 (rel. Aug. 10, 2007). This petition is still pending.

forfeitures of license rights, upon licensees who fail to meet construction benchmarks.¹⁷² Having already specified severe automatic penalties for failing to meet an applicable benchmark (*i.e.*, loss of license term; loss of territory), it is inappropriate for the Commission to propose additional sanctions in the form of fines and license forfeitures when no standard has been articulated that would put the licensee on adequate notice of what circumstances would invoke these additional penalties. MetroPCS asks the Commission to clarify that a licensee will only be subject to monetary fines and further termination of license rights if the licensee shall have failed to have taken meaningful steps toward service implementation as of the initial (fourth- year) benchmark or shall have failed to have provided “substantial service” as of the end of the license term (8 or 10 years).

For instance, new rule Section 27.14(p)(1) states that an AWS licensee who fails to meet the fourth-year 35% population coverage benchmark “. . . may be subject to enforcement action, including forfeitures. In addition, the licensee may lose authority to operate in part of the remaining unserved areas of the license.”¹⁷³ Similarly, proposed new rule Section 27.14(p)(2) contemplates that a licensee failing to meet the end-of-license-term benchmark “. . . may also be subject to enforcement action, including forfeitures. In addition, a licensee that provides signal coverage and offers service at a level that is below the end-of-term benchmark may be subject to license termination.”¹⁷⁴

The problem with these proposed new rules is that absolutely no standard is articulated that would put licensees on notice as to when these supplemental sanctions might be imposed. Since the penalties alluded to -- monetary penalties of uncertain magnitude, and license

¹⁷² See *FNPRM*, at p. 14, proposed rules Sections 27.14(p)(1) and 27.14(p)(2).

¹⁷³ *Id.* at p. 14, proposed rule Section 27.14(p)(1).

¹⁷⁴ *Id.* at p. 14, proposed rule Section 27.14(p)(2).

forfeitures – are quite severe, it is only fair that licensees be placed on notice of how these proposed rules will be applied. However, the fine and forfeiture language in the rule is extremely vague and there is no discussion that provides licensees with guidance on how to avoid such further sanctions.

MetroPCS presumes that the intention of the Commission in alluding to possible additional sanctions is to allow it to draw distinctions between those licensees that have made material progress toward the construction benchmark (though failing to meet it), and those licensees that have failed to have made meaningful strides toward the benchmark and that appear to be “warehousing” spectrum. If such is the case, then the Commission should clarify the proposed rules to read as follows (new language in boldface):

27.14(p)(1) - If any AWS licensee holding an authorization in the 1915-1920 MHz and 1995-2000 MHz bands fails to provide signal coverage and offer service to at least 35 percent of the population in the licensed area within four years of the date on which the original license was issued, the term of that license authorization will be reduced by two years. **Such license may be subject to enforcement action, including forfeitures, or may lose authority to operate in part of the remaining unserved areas of the license, if the licensee has not taken meaningful steps toward service implementation sufficient to demonstrate an ability to meet the applicable construction standard at the end of the license term.**

27.14(p)(2) - If any AWS licensee holding an authorization in the 1915-1920 MHz and 1995-2000 MHz [bands] fails to provide signal coverage and offer service to at least 70 percent of the population in each licensed area at the end of the license term, that licensee’s authorization will terminate automatically without Commission action for those geographic portions of its license in which the licensee is not providing service, and those unserved areas will become available for reassignment by the Commission. In addition, a licensee that provides signal coverage and offers service at a level that is below the end-of-term benchmark may also be subject to enforcement action, including forfeitures, and may be subject to license termination, **if the licensee has failed to provide substantial service in the geographic area of the license authorization by the end of the license term.**

The use of a “substantial-service” standard to govern whether licensees will be subject to further sanctions at the end of the license term is a familiar approach. The Commission already uses such a substantial-service standard in other licensing contexts. For example, Section 27.14

of the Rules governing construction and renewal requirements for Advanced Wireless Service (“AWS”) and Wireless Communications Service (“WCS”) licensees provides:

AWS and WCS licensees must make a showing of “substantial service” in their license area within the prescribed license term set forth in §27.13. “Substantial” service is defined as service which is sound, favorable, and substantially above a level of mediocre service which just might minimally warrant renewal. Failure by any licensee to meet this requirement will result in forfeiture of the license and the licensee will be ineligible to regain it.¹⁷⁵

In addition, there is case law that provides frames of reference for licensees to ascertain whether the service being provided meets this substantial-service standard.¹⁷⁶ Thus, the use of a substantial-service standard would put the build-out requirements on a much firmer legal footing. And, perhaps more importantly, potential bidders like MetroPCS would not be as likely to be deterred from bidding, due to the vagueness of the sanctions alluded to in the proposed rules.

V. THE COMMISSION SHOULD ESTABLISH SERVICE RULES FOR THE J BLOCK IDENTICAL TO THOSE FOR THE H BLOCK

As discussed above, MetroPCS opposes the combination of the 5 MHz of J Block spectrum with the 20 MHz of AWS-3 spectrum. Rather, MetroPCS submits that the public interest would be better served by the Commission promulgating service rules for the J Block as part of the next allocation order adopted in this proceeding with rules identical to those that the Commission is proposing for the H Block (but subject to the changes proposed by MetroPCS herein for the H Block). Further, as discussed above, the Commission should auction the J Block at the same time that it auctions the H Block. MetroPCS believes that the public interest is best

¹⁷⁵ 47 C.F.R. § 27.14.

¹⁷⁶ See *Amendment of the Commission’s Rules to Establish New Personal Communications Systems, Narrowband PCS*, Second Report and Order and Second Further Notice of Proposed Rulemaking, 15 FCC Rcd, 10456, at paras. 27-28 (rel. May 18, 2000); *Application of ITV, Inc. to Renew the License for Station KIVD0011*, 22 FCC Rcd. 1908 (rel. Jan. 31, 2007).

served when multiple fungible channels are auctioned simultaneously with minimal restrictions, flexible uses and no eligibility restrictions.

Moreover, since Auction 73 amply demonstrated that there is substantial demand for licenses serving smaller geographic areas, the Commission should auction the J Block in BTA geographic areas with the same performance requirements and other service rules as the H Block. Although the Commission has decided on some previous occasions to allocate spectrum in a variety of different-sized blocks, there is insufficient spectrum for the Commission to do so here. Further, since Auction 73 failed to create meaningful licensing opportunities for rural, regional and mid-tier carriers, the H and J Block spectrum should be designed so as to be attractive to these potential bidders. Accordingly, the Commission should license the J Block on the basis of BTAs, just like the H Block. In doing so, the Commission would not be ignoring the interests of bidders with larger spectrum or geographic aspirations, as they would clearly be able through the simultaneous multi-round auction process to purchase spectrum in whatever geographic areas may meet their business plans. In addition, the Commission should promulgate service rules for the J Block concurrently with those for the H Block, since both blocks of spectrum should be auctioned at the same time, for the reasons presented previously herein. Any delay in crafting and implementing service rules for the J Block would delay competition in the wireless marketplace by delaying the licensing of that spectrum and the development of the necessary infrastructure and handsets to utilize that spectrum.

In addition, there appears to be no need in the J Block for the special technical rules surrounding the mobile devices in the H block. Accordingly, the mobile emission mask and power limits should be the same for the J Block as for the AWS-1 spectrum, the band directly adjacent to the J Block. Finally, the Commission should impose the same base station technical

requirements upon the J Block as upon the H Block, as there is no need for special technical rules for the J Block.

VI. CONCLUSION

For the foregoing reasons, the Commission in its upcoming Order regarding AWS spectrum should implement the proposals described above by MetroPCS.

Respectfully submitted,

MetroPCS Communications, Inc.



Carl W. Northrop
Michael Lazarus
PAUL, HASTINGS, JANOFSKY & WALKER LLP
875 15th Street, NW
Washington, DC 20005
Telephone: (202) 551-1700
Facsimile: (202) 551-1705

Mark A. Stachiw
Executive Vice President, General Counsel and Secretary
MetroPCS Communications, Inc.
2250 Lakeside Blvd.
Richardson, Texas 75082
Telephone: (214) 570-5800
Facsimile: (866) 685-9618

Its Attorneys

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