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

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

To: The Commission

COMMENTS OF
THE RURAL TELECOMMUNICATIONS GROUP, INC.

The Rural Telecommunications Group, Inc. ("RTG"),[1] by its attorneys, hereby submits its comments in response to the *Notice* in the above-captioned proceedings.[2] RTG strongly supports modification of the service area size for geographic licenses yet to be auctioned in the

[1] RTG is a Section 501(c)(6) trade association dedicated to promoting wireless opportunities for rural telecommunications companies through advocacy and education in a manner that best represents the interests of its membership. RTG's members have joined together to speed delivery of new, efficient, and innovative telecommunications technologies to the populations of remote and underserved sections of the country. RTG's members are small, rural businesses serving or seeking to serve secondary, tertiary and rural markets. RTG's members are comprised of both independent wireless carriers and wireless carriers that are affiliated with rural telephone companies.

[2] *Service Rules for the 698-746, 747-762 and 777-792 MHz Bands*, WT No. 06-150, Notice of Proposed Rulemaking, *Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, CC Docket No. 94-102, Fourth Further Notice of Proposed Rulemaking, *Section 68.4(a) of the Commission's Rules Governing Hearing Aid-Compatible Telephones*, WT Docket No. 01-309, Second Further Notice of Proposed Rulemaking, FCC 06-114 (rel. Aug. 10, 2006) ("*Notice*").

Lower and Upper 700 MHz bands (collectively "700 MHz").[3] Specifically, RTG supports auctioning additional spectrum in the 700 MHz bands on the basis of Metropolitan Statistical Areas ("MSAs") and Rural Service Areas ("RSAs") (collectively Cellular Market Areas ("CMAs")). RTG also supports adopting a new bandplan for the Upper 700 MHz in order to create additional opportunities for applicants to acquire 700 MHz licenses. RTG requests that the Commission set aside "entrepreneurs blocks" to ensure that small entities and other new entrants have a meaningful opportunity to acquire 700 MHz licenses. RTG also supports a triggered "keep what you use" re-licensing mechanism similar to that used in unserved area cellular licensing.[4] Finally, RTG opposes the imposition of E911 and hearing aid compatibility requirements on 700 MHz licensees at this time.

I. THE COMMISSION SHOULD LICENSE TWO ADDITIONAL 700 MHZ BLOCKS ON THE BASIS OF CELLULAR MARKET AREAS

Circumstances have changed dramatically since the Federal Communications Commission ("FCC" or "Commission") adopted the licensing schemes for the 700 MHz bands,[5] and these changes warrant the Commission revisiting and modifying the size of the geographic areas on which future 700 MHz licenses will be auctioned. As RTG explained in its *Supporting*

[3] *See* RTG Comments in GN Docket No. 01-74 and WT Docket No. 99-168 (filed Sep. 27, 2005) ("*Supporting Comments*"), filed in support of the a petition of the Rural Cellular Association ("RCA"), Petition To Institute Review and Modification of the Size of Service Areas for Geographic Licensing for the Lower and Upper Bands of 700 MHz Spectrum Not Yet Auctioned, in GN Docket No. 01-74 and WT Docket 99-168 (filed July 29, 2005) ("*RCA Petition*").

[4] See 47 C.F.R. §§ 22.949 *et seq*.

[5] *See* Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, WT Docket No. 99-168, First Report and Order, 15 FCC Rcd 476 (2000) ("*Upper 700 MHz First Report and Order*"), *subsequent history omitted*; Reallocation and Service Rules for the 698-746 Spectrum MHz Band (Television Channels 52-59), GN Docket No. 01-74, *Report and Order*, FCC 01-364, 17 FCC Rcd 1022 (2002) ("*Lower 700 MHz Report and Order*"), Erratum, 17 FCC Rcd 2152 (2002).

Comments, the Commission is no longer under a looming deadline to complete the auction and deposit the proceeds in a very short time period, and the Commission need no longer speculate about the timing of the completion of the DTV transition.[6] Accordingly, the Commission is wise to revisit 700 MHz licensing, and the public interest would be served by modifying the licensing approach.

In the *Notice*, the Commission seeks comment on whether it should auction additional spectrum in the 700 MHz Band over service area sizes other than Economic Area Groupings ("EAGs"). *Notice* ¶ 27. In particular, the Commission seeks comment on the request by RCA, and supported by RTG and other parties, that the Commission assign additional CMA-sized licenses in the 700 MHz Band.[7]

RTG *strongly* supports auctioning additional 700 MHz spectrum on the basis of CMAs. It is axiomatic that small and rural companies cannot successfully compete for licenses auctioned on the basis of huge geographic areas such as the six EAGs or the twelve Regional Economic Area Groupings ("REAGs"). Indeed, the results of the recent AWS auction confirm that virtually the only parties that *can* acquire large geographic license areas are the large incumbent, mobile carriers or affiliated entities.[8] Moreover, in the experience of RTG's members, having acquired vast licenses areas that include both densely populated urban and suburban area as well as sparsely populated rural areas, large carriers are not interested in partitioning or leasing the

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[6] *See Supporting Comments* pp. 2-5.

[7] *See supra* note 3.

[8] T-Mobile and Cellco won the majority of spectrum licensed on an REAG basis. Cricket Licensee (Reauction), Inc., and Denali Spectrum License, LLC, two bidders affiliated with Leap Wireless International, Inc., each won a ten-megahertz REAG license, and Barat Wireless, L.P., of which United States Cellular Corporation owns 90%, also won a ten-megahertz REAG license.

rural portions of their license areas. This is the case even if the large licensee has no intention of serving the rural areas. Accordingly, once the Commission licenses spectrum on the basis of EAGs or other huge areas, it will be extremely difficult for small and rural companies and new entrants to gain access to it.

By contrast, auctioning additional 700 MHz spectrum on the basis of CMAs will create opportunities for small and rural businesses and will foster the deployment of competitive wireless broadband services in rural areas. By modifying its 700 MHz licensing plan to license additional blocks on the basis of CMAs, the Commission will "promote 'economic opportunity and competition' and [] disseminate licenses 'among a wide variety of applicants, including small businesses, rural telephone companies, and businesses owned by members of minority groups and women'."[9]

The 700 MHz Band is particularly desirable for rapid deployment of mobile and other advanced services in high-cost areas because of its propagation and other technical characteristics. In RTG's experience, the cost of deploying systems in rural areas is considerably greater at 1900 MHz than at 850 MHz as almost twice as many sites are needed to provide the same amount of coverage. Because 700 MHz spectrum has even more favorable propagation characteristics than 850 MHz, 700 MHz is particularly suited to providing service to rural areas.

[9] *Lower 700 MHz Report and Order* ¶ 95, *quoting* 47 USC §309(j)(3)(B). In the *AWS Order*, the Commission specifically noted, the FCC Federal Advisory Committee on Diversity for Communications in the Digital Age adopted a recommendation that as a means to promote participation by minorities in emerging technology sectors of the communications industry, the Commission identify spectrum auctions whereby the licenses assigned cover small geographic areas such as MSAs and RSAs. *See in re* Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands, Order on Reconsideration in WT Docket No. 02-353, FCC 05-149 at note 50 (rel. August 15, 2005) ("*AWS Order*"), *citing* New Technologies Subcommittee Recommendations to the Federal Communications Commission's Advisory Committee on Diversity for Communications in the Digital Age, *Recommendations on Spectrum and Access to Capital* (rel. June 14, 2004).

Accordingly, providing service at 700 MHz may be cost effective where providing it in the AWS bands (1710-1755 MHz and 2110-2155 MHz) or PCS bands may not be, and the Commission should ensure that companies interested in providing service to rural areas have access to the 700 MHz spectrum.

The use of varying size license areas, including CMAs, will not result in excessive transaction costs for entities interested in aggregating regional or nationwide licenses. In the AWS auction, for example, the Sprint-affiliated SpectrumCo essentially created a nationwide footprint by acquiring 134 of the 176 available B block Economic Area ("EA") licenses (as well as a few C and D block licenses).[10] The use of EAs in the AWS auction clearly did not prevent SpectrumCo from being able to aggregate smaller sized licenses into a nationwide footprint.

Rather than being less efficient, the use of smaller size license areas results in greater auction and market efficiency because it allows bidders to tailor their auction strategy and spectrum acquisitions to meet their business plans. In the *AWS Order*, the Commission stated:

> RSAs and MSAs allow entities to mix and match rural and urban areas according to their business plans and that, by being smaller, these types of geographic service areas provide entry opportunities for smaller carriers, new entrants, and rural telephone companies.[11]

Thus, if a bidder wants to aggregate 24 megahertz of paired AWS spectrum—an amount of spectrum comparable to 25-megahertz cellular licenses and 30-megahertz broadband PCS licenses—within the same EAG or region,[12] it may do so. A large carrier, however, may not

[10] With the exception of only two markets, the remaining forty (40) B block licenses that SpectrumCo did not acquire presumably were not part of SpectrumCo's business plan as many of the licenses are held by the FCC or are located in rural Montana, North and South Dakota or west Texas, and are licenses on which SpectrumCo never placed a bid.

[11] *See AWS Order* ¶ 14 (footnoted omitted).

[12] *See Notice* ¶ 15.

need 24-plus megahertz throughout an entire EAG. A large carrier may want 24 megahertz in an MSA or group of MSAs within an EAG, but may have no need for that much spectrum in the adjoining RSAs. In the AWS auction, for example, T-Mobile was able to bid on and acquire targeted CMA licenses, presumably to bolster markets in which T-Mobile needed additional spectrum, without necessarily having to acquire all of the surrounding rural areas.[13] The use of CMAs, therefore allowed for more targeted spectrum acquisition resulting in greater efficiencies to both large and small applicants and ultimately consumers.

Licensing all of the remaining 700 MHz spectrum on the basis of the huge geographic area licenses will only serve to benefit the large incumbent wireless carriers. This will stifle competition by limiting the number of new entrants that can obtain spectrum. By contrast, licensing additional spectrum on the basis of various sized geographic areas will promote competition and encourage innovation by allowing a greater number of entities to acquire 700 MHz spectrum. By modifying its 700 MHz licensing plan to license additional blocks on the basis of CMAs, the Commission will "promote 'economic opportunity and competition' and [] disseminate licenses 'among a wide variety of applicants, including small businesses, rural telephone companies, and businesses owned by members of minority groups and women'."[14] RTG therefore strongly encourages the Commission to license the remaining 700 MHz spectrum "over a range of various sized geographic areas, including smaller service areas such as MSAs/RSAs…"[15]

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[13] T-Mobile was the high bidder for 83 MSAs but only 10 RSAs.

[14] *Lower 700 MHz Report and Order* ¶ 95, *quoting* 47 USC §309(j)(3)(B).

[15] Facilitating the Provision of Spectrum-Based Services to Rural Areas and Promoting Opportunities for Rural Telephone Companies To Provide Spectrum-Based Services, Report and Order and Further Notice of Proposed Rulemaking, 19 FCC Rcd 19078, ¶ 31 (2004).

In the *Notice*, the Commission seeks comment on which of the existing blocks or any block in any potential revised band plan would be best suited for a different service area size. *See Notice* ¶ 42. RTG continues to support licensing the B block in the Lower 700 MHz on a CMA-basis as RTG proposed in its *Supporting Comments*. This will allow existing Lower 700 MHz C block licensees the flexibility of augmenting their spectrum with adjacent bandwidth for a combined 24-megahertz block of spectrum (two paired 12-megahertz blocks). This in turn will allow licensees greater flexibility to deploy bandwidth intensive services such as high-speed Internet access. Licensees deploying service using the twelve-megahertz C block licenses will need additional bandwidth to ensure adequate throughput capacity necessary for future growth and to accommodate the diverse technologies that are available.[16]

RTG also continues to support licensing ten megahertz of Upper 700 MHz on a CMA basis as it proposed in its *Supporting Comments*. RTG had recommended that the Commission license the C block in the Upper 700 MHz on a CMA-basis, and RTG continues to believe that the C block would be workable. RTG, however, supports dividing the existing twenty (20) megahertz D block into two separate ten-megahertz blocks. If the Commission revises its bandplan in this manner, then it could license any of the non-auctioned Upper 700 MHz blocks (C, D or newly created E) on a CMA-basis.

RTG supports breaking up the current D block in order to create more opportunities for new entrants and small businesses to acquire spectrum. Dividing the block will not prevent large carriers from aggregating the spectrum if they value it the most highly, but it will increase

[16] In its *Supporting Comments*, RTG explained that existing C block licensees deploying broadband service may need more than 12 megahertz of spectrum even in rural areas because of limitations resulting from proprietary channel spacing and intra-system interference specifications as well as protection and coordination with neighboring systems deploying different services and technologies.

opportunities for additional entrants and will therefore increase competition both for the spectrum and the services that will be provided over the spectrum.

II. THE COMMISSION SHOULD SET ASIDE "ENTREPRENEURS" BLOCKS FOR SMALL ENTITIES AND NEW ENTRANTS

RTG requests that the Commission set-aside "entrepreneurs" blocks of 700 MHz spectrum for small entities and new entrants that do not already have significant spectrum holdings. Although bidding credits and small license areas are helpful in allowing some rural and small entities and new entrants to gain access to spectrum, they are not in themselves sufficient. The Commission need only look at the results of the AWS auction for confirmation that large incumbent wireless carriers acquired the vast majority of the available spectrum. New entrants and small and rural companies were only successful in acquiring a small amount of the available spectrum.[17]

In order to ensure competition and to spur innovation and the deployment of services to rural and underserved areas, the Commission should set-aside some 700 MHz spectrum for "entrepreneurs." RTG suggests that the Commission adopt rules similar to those used in licensing entrepreneurs blocks in PCS.[18]

III. THE COMMISSION SHOULD ADOPT A TRIGGERED KEEP WHAT YOU USE LICENSING APPROACH IN RURAL AREAS

RTG supports the Commission's adoption of a triggered "keep what you use" licensing approach in rural areas. This will ensure that an entity that is willing to provide service to a rural area has access to the spectrum if the original licensee is not providing adequate service to such

[17] The fifty-seven designated entities that were winning bidders in Auction 66 won only 215 licenses out of the available 1,122 licenses. Two of these designated entities—the two most successful—are affiliated with incumbent carriers Leap Wireless and U.S. Cellular. Small and rural businesses that are not affiliated with large incumbent wireless carriers won licenses covering only a very small percentage of the population.

[18] *See* 47 C.F.R. § 24.709.

rural area. RTG believes that the large nation-wide carriers are less likely to use spectrum in rural portions of their license areas (other than along interstate corridors), and that a "keep what you use" mechanism would be an efficient way to provide spectrum access to other potential service providers.

The Commission could administer the plan in a similar manner to the rules for licensing unserved cellular areas. That is, after a certain period of time, any entity could apply to serve areas that the licensee does not serve. RTG notes that licensees are required to file maps and supporting documents to demonstrate their compliance with applicable construction requirements. RTG proposes that any area not covered in such filing would be available for licensing by any other applicant on a first come basis. Prospective providers also should be allowed to challenge a licensee's claims of coverage. This will eliminate the incentive by a licensee to "fudge" on its construction certification.

IV. THE COMMISSION SHOULD NOT APPLY E911 AND HAC OBLIGATIONS TO 700 MHZ LICENSES AT THIS TIME

In the *Notice*, the Commission tentatively concluded that services provided in the 700 MHz band that meet criteria established in the *E911 Scope Order* should be subject to 911/E911 requirements and that such services also should be subject to the hearing aid-compatibility ("HAC") requirements. *See Notice* ¶ 91. RTG opposes the application of 911/E911 and HAC requirements to 700 MHz at this time. RTG believes that the imposition of such requirements is premature. It is not yet clear what services will be provided or what technology will be used to provide them. The technologies chosen to deploy 700 MHz services may or may not be able to comply with existing 911/E911/HAC requirements. RTG notes for example, that currently, many rural GSM carriers cannot meet the Commission's E911 accuracy requirements because no GPS handsets are available for GSM and cell sites tend to be deployed in a "string of pearls"

along highways. By imposing 911/E911/HAC requirements on 700 MHz deployments now, the Commission may completely stifle rural deployments. Accordingly, RTG encourages the Commission to wait to see how services develop and to revisit the issue in the future.

CONCLUSION

RTG commends the Commission for reexamining the licensing scheme for 700 MHz spectrum. The Commission now has an opportunity to revise its rules to promote competition and the deployment of spectrum-based services to rural areas and the dissemination of licenses among a wide variety of applicants, including small businesses, and rural telephone companies. The Commission can accomplish this by licensing an additional two blocks of 700 MHz spectrum on the basis of CMAs and by licensing some 700 MHz blocks as entrepreneurs blocks restricted to rural and small entities and new entrants. The Commission also can ensure the deployment of services to rural areas by adopting a triggered "keep what you use" licensing mechanism under which entities that truly desire to provide service to rural areas will have access to spectrum.

Respectfully Submitted,

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