

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
700 MHz Mobile Equipment Capability)	
)	
Petition for Rulemaking Regarding the Need)	RM No. 11592
for 700 MHz Mobile Equipment To Be Capable)	
of Operating on All Paired Commercial)	
700 MHz Frequency Blocks)	
)	

COMMENTS OF RURAL CELLULAR ASSOCIATION

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TABLE OF CONTENTS

SUMMARY	i
I. INTRODUCTION.....	2
II. BACKGROUND.....	3
III. DISCUSSION.	4
A. Commission Spectrum Policies Are Aimed at Accelerating Broadband Deployment in Rural America.	5
B. Action by the Commission Is Needed To Protect and Advance Its Policies for Utilization of 700 MHz Spectrum for the Benefit of Consumers in Rural Areas.	7
C. Attempts by Large Wireless Carriers and Other Parties To Defend the Status Quo Are Not Persuasive.	11
1. Efforts To Defend the Standard-Setting Process for the Use of 700 MHz Spectrum Are Neither Convincing nor Relevant.	11
2. Verizon Wireless Wants Its Business Plan, Not the Commission’s Policies, To Control the Utilization of 700 MHz Band Spectrum.	14
3. Claims That the 700 MHz Band Class Plan Was Driven by Technical Constraints Should Not Deflect the Commission from Examining the Alliance’s Concerns in a Rulemaking Proceeding.	17
a. Opponents of the Alliance’s Petition Overstate Their Claim That the Band Classes Should Not Combine Upper and Lower 700 MHz Bands.	17
b. Arguments Advanced by Opponents of the Alliance’s Petition Illustrate the Risks Involved If the Commission Does Not Make Its Own Assessment of How Interference Problems Should Be Addressed.....	18
c. Claims That Granting Relief to the Alliance Would Require Modification of Chipsets Intended for Use in the 700 MHz Band Warrant Review by the Commission.	20
D. The Action Sought by the Alliance’s Petition Is Consistent with Recommendations Made in the Broadband Plan for Utilization of the 700 MHz Band by the Public Safety Community.....	21
IV. CONCLUSION.....	22

SUMMARY

The 700 MHz Block A Good Faith Purchasers Alliance, in its petition for rulemaking, has raised serious issues regarding the ways in which decisions concerning the development and production of mobile devices are impinging upon the effective use of spectrum in the Lower A Block of the 700 MHz band to bring affordable broadband service to rural consumers.

The Alliance demonstrates that decisions by the 3GPP industry standards-setting body establishing Band Classes for the 700 MHz spectrum, coupled with purchasing decisions for 700 MHz mobile devices being made by the large wireless carriers, are threatening to make it economically infeasible for small rural and regional wireless carriers to utilize their Lower A Band spectrum to deploy broadband in unserved and underserved rural areas throughout the country.

Specifically, Band Classes adopted by 3GPP have been tailored to accommodate the business plans of AT&T and Verizon Wireless for their use of 700 MHz spectrum, but are also impeding the development of mobile devices that are operable not only in the Lower A Block but also in other paired commercial frequencies in the 700 MHz band. Although one of the Band Classes (Band Class 12) is intended for mobile devices that are operable in the Lower A Block and in the Lower B and C Blocks, the large carriers have shown no interest in pursuing the development or use of this equipment, and it is infeasible for small rural and regional carriers to order Band Class 12 mobile devices in sufficient quantity to make the devices affordable for their customers.

The result of these developments is that the Lower A Block spectrum available for use in rural areas is on the brink of being orphaned, even though small rural and regional carriers have invested heavily in the spectrum and have developed aggressive plans to bring high-speed broadband to rural consumers.

If the Commission does not act to forestall this outcome, the result will be to endanger the Commission's policies for using 700 MHz spectrum to help close the gap between mobile broadband availability in rural and urban areas, and to provide investment opportunities for small rural and regional carriers that have led the way in bringing mobile broadband to rural areas. The utilization of 700 MHz spectrum will follow the blueprints of the large wireless carriers' business plans, which give little priority to deploying broadband in unserved and underserved rural areas.

In their ex parte challenges to the Alliance's rulemaking petition, the large carriers assert that the Band Classes developed by 3GPP have been driven by technical issues that in part are a product of the Commission's 700 MHz licensing plan, and that mobile devices being produced by equipment manufacturers for use in the 700 MHz band reflect the practical choices made necessary by these technical constraints. In attempting to make this case, however, Verizon Wireless generally concedes that these technical problems, that supposedly preclude development of equipment that operates across paired commercial frequencies in the 700 MHz band, are not insurmountable. The fact is that the standard-setting process has produced ways of addressing these problems that serve the interests of the large carriers while at the same time compromising the ability of small rural and regional carriers to effectively use Lower A Block spectrum.

Too much is at stake for rural consumers and for the Commission's broadband policies to allow the business plans of the large wireless carriers to exert unchecked influence over the adoption of Band Classes and the production of mobile devices for the 700 MHz band. RCA urges the Commission to initiate a rulemaking proceeding to investigate these issues and take necessary action to ensure the protection and promotion of its policies for promoting competition and bringing mobile broadband to rural America.

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Rural Cellular Association (“RCA”),¹ by counsel, hereby submits these Comments in response to a request that interested parties address “relevant technical, legal, economic, and policy issues”² involved with regard to a request made by the 700 MHz Block A Good Faith Purchasers Alliance (“Alliance”) for the initiation of a rulemaking proceeding by the Commission. The purpose of the proceeding would be to adopt rules that prohibit restrictive equipment arrangements, in connection with utilization of 700 MHz spectrum, that would be contrary to the public interest.³

¹ RCA is an association representing the interests of nearly 100 regional and rural wireless licensees providing commercial services to subscribers throughout the Nation and licensed to serve more than 80 percent of the country. Most of RCA’s members serve fewer than 500,000 customers.

² *Wireless Telecommunications Bureau Seeks Comment on Petition for Rulemaking Regarding 700 MHz Band Mobile Equipment Design and Procurement Practices*, Public Notice, RM No. 11592, DA 10-278 (Feb. 18, 2010).

³ 700 MHz Block A Good Faith Purchasers Alliance, *Petition for Rulemaking Regarding the Need for 700 MHz Mobile Equipment To Be Capable of Operating on All Paired Commercial 700 MHz Frequency Blocks*, RM No. 11592, filed Sept. 29, 2009 (“Petition”). The Alliance consists of Cellular South Licenses, Inc.; Cavalier Wireless, LLC; Continuum 700, LLC; and King Street Wireless, L.P. *Id.* at 1 n.1.

I. INTRODUCTION.

The Petition filed by the Alliance asks the Commission to commence a rulemaking proceeding and to prescribe rules to ensure that consumers have reasonable access to all paired commercial frequency blocks licensed by the Commission in the 700 MHz band, and that restrictive mobile equipment banding arrangements do not interfere with this access in ways that are contrary to the public interest.⁴ The Alliance is concerned that small rural and regional wireless carriers that have invested in Lower A Block spectrum will not be able to utilize this spectrum because of the threatened unavailability of suitable mobile devices that will operate both in the Lower A Block and in other paired commercial blocks in the 700 MHz band.⁵

As RCA discusses in these Comments, the Alliance and opponents of its rulemaking petition⁶ have presented sharply differing scenarios regarding the most effective ways to promote broadband deployment in the 700 MHz band. The Alliance argues that the largest wireless carriers—AT&T and Verizon Wireless—have made substantial spectrum acquisitions in the 700 MHz band, and they are now driving the process for developing mobile devices for use in the band in a direction that serves their own business purposes but that threatens to undermine broadband deployment in the Lower A Block.

Because the marketplace appears likely to produce results that will be detrimental to consumers and to competition, the Alliance argues that the Commission must intervene to ensure

⁴ *Id.* at i.

⁵ *Id.* at 3.

⁶ Several parties have filed pleadings in the RM No. 11592 proceeding or other Commission proceedings expressing views in opposition to the Petition or taking positions on issues that are substantially the same as those raised in the Petition. *See, e.g.*, Verizon Wireless Reply Comments, WT Docket No. 09-66 (filed Oct. 22, 2009) (“Verizon Wireless Reply Comments”); AT&T, Inc. Reply Comments, WT Docket No. 09-66 (filed Oct. 22, 2009) (“AT&T Reply Comments”); Verizon Wireless Ex Parte Letter, WT Docket No. 09-66; GN Docket No. 09-157 (filed Dec. 18, 2009) (“Verizon Wireless Letter”); Qualcomm[®] Ex Parte Letter, WT Docket No. 09-66; GN Docket No. 09-157 (filed Jan. 25, 2010) (“Qualcomm Letter”); Motorola Comments, RM No. 11592 (filed Feb. 12, 2010) (“Motorola Comments”).

that the Lower A Block is used efficiently for broadband deployment. Without this intervention, the operation of the market will not foster competition or ensure efficient spectrum use. The Alliance contends that the Commission's policies for utilization of 700 MHz spectrum are in jeopardy, especially with regard to making mobile broadband available to consumers in rural areas.

Opponents of Alliance's Petition attempt to paint a different picture, claiming that technical issues make the relief sought by the Alliance impractical. Given these technical problems, intervention by the Commission to provide relief would be costly, and would delay the utilization of 700 MHz spectrum for broadband. Opponents also claim that small rural and regional carriers holding Lower A Block licenses can fashion their own solutions for the development of equipment usable in the Lower A Block. Doing so, these opponents argue, would avoid the problems that would result from Commission intervention, while at the same time ensuring efficient use of the Lower A Block spectrum.

As RCA demonstrates in the following sections, both from the perspective of rural consumers, and from the perspective of the Commission's broadband policies, the balance weighs heavily in favor of a rulemaking to pursue the relief sought by the Alliance.

II. BACKGROUND.

Spectrum in the 700 MHz band was offered by the Commission in Auction 73, which was completed in March 2008. The Commission licensed a total of 62 megahertz of spectrum in five blocks, with gross bids exceeding \$19 billion.⁷ The Commission established a 12-megahertz A Block (consisting of 6-megahertz paired blocks) in the Lower 700 MHz band for commercial

⁷ FCC Auction 73 Factsheet, accessed at http://wireless.fcc.gov/auctions/default.htm?job=auction_fact_sheet&id=73; *Auction of 700 MHz Band License Closes*, Public Notice, DA 08-595 (Mar. 20, 2008), at 1.

use, and established Economic Areas as the service areas for the A Block, resulting in 176 licenses available for the block.⁸

In conjunction with the licensing of 700 MHz spectrum through the Commission's competitive bidding process, the wireless industry has undertaken the task of developing Long Term Evolution ("LTE") standards for utilization of the spectrum through an international standards-setting organization. The 3rd Generation Partnership Project ("3GPP"TM) has established LTE standards⁹ for the various 700 MHz Band Classes, which also were established by 3GPP.

Thus far, 3GPP has designated four 700 MHz Band Classes: Band Class 12 (Lower A Block, Lower B Block, Lower C Block); Band Class 13 (Upper C Block); Band Class 14 (Upper D Block); and Band Class 17 (Lower B Block, Lower C Block).

III. DISCUSSION.

The Alliance's Petition demonstrates that consumers in rural America have an important stake in the outcome of processes underway to develop and produce mobile devices for use in the 700 MHz band. The Commission's decisions regarding the use of spectrum in the band offer great promise for the deployment of high-speed broadband services in unserved and underserved rural areas. The Petition, however, points to significant risks that the Lower A Block could become orphaned spectrum with significant under-utilization in rural areas unless the Commission

⁸ Service Rules for the 698-746, 747-762 and 777-792 MHz Bands; Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems; Section 68.4(a) of the Commission's Rules Governing Hearing Aid-Compatible Telephones; Biennial Regulatory Review—Amendment of Parts 1, 22, 24, 27, and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services; Former Nextel Communications, Inc. Upper 700 MHz Guard Band Licenses and Revisions to Part 27 of the Commission's Rules; Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band; and Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010, *Second Report and Order*, 22 FCC Rcd 15289, 15324 (para. 83) (2007) ("*700 MHz Second Report and Order*").

⁹ See 3GPP Release No. 8, described at the 3GPP website, accessed at <http://www.3gpp.org/LTE>.

acts to reverse the direction of current plans for the development and production of mobile devices for use in the 700 MHz band.

As RCA discusses in the following sections, the Alliance has presented a strong basis for the Commission to go forward with a rulemaking for the purpose of ensuring that its policies with respect to the use of 700 MHz spectrum to help bring broadband to rural consumers are not frustrated by large wireless carriers' plans for utilization of the spectrum.

A. Commission Spectrum Policies Are Aimed at Accelerating Broadband Deployment in Rural America.

The Commission has long recognized the importance of pursuing spectrum policies that will benefit consumers in unserved and underserved rural areas and will encourage market entry by small businesses. The recently released National Broadband Plan (“Broadband Plan” or “Plan”) is reflective of this approach.¹⁰ The Broadband Plan indicates that the Commission should act “to ensure productive use of spectrum to address broadband gaps in underserved areas”¹¹ and also notes the Commission’s concern “that existing licensees may not fully utilize or plan to utilize the entire spectrum assigned to them; as a result, a substantial amount of spectrum may be underused, especially in rural areas.”¹²

The Report issued last year by then Acting Chairman Copps underscores the importance of deploying broadband services in rural America, concluding that broadband:

will improve the quality of education, healthcare, and public safety in rural America, among other benefits. On a larger scale, ensuring that all Americans, includ-

¹⁰ See Omnibus Broadband Initiative (“OBI”), FCC, CONNECTING AMERICA: THE NATIONAL BROADBAND PLAN (Mar. 16, 2010) at 78 (noting that “[a]dditional spectrum is also required to accommodate multiple providers in a competitive marketplace, including new entrants and small businesses, as well as to enable wireless services to compete with wireline services” and citing a recommendation by the U.S. Department of Justice that the Commission should free up spectrum to promote the potential of wireless services to reach underserved areas).

¹¹ *Id.* at 83.

¹² *Id.*

ing those in rural areas, have access to such services will help to improve America's economy, its ability to compete internationally, and its unity as a nation.¹³

In addition, the Joint Statement on Broadband adopted by the Commission in conjunction with the issuance of the Broadband Plan calls attention to the fact that rural consumers should not be left behind as America advances to the broadband communications era.¹⁴

In the licensing proceeding for the 700 MHz band, the Commission stressed the importance of policies that would bring mobile broadband to rural consumers and provide opportunities for small rural and regional wireless carriers. The Commission observed that the 700 MHz spectrum “is particularly well-suited for wireless broadband services[,]”¹⁵ and decided that it should take advantage of the exceptional propagation characteristics of the 700 MHz band in order to “promote the provision of innovative services to consumers throughout the license areas, including in rural areas.”¹⁶

In explaining its band plan for 700 MHz spectrum, the Commission stressed that it established the Lower A Block in order to “create opportunities for a variety of bidders, including small and regional providers, to acquire licenses for small geographic areas in the Lower 700

¹³ Michael J. Copps, Acting Chairman, FCC, BRINGING BROADBAND TO RURAL AMERICA: REPORT ON A RURAL BROADBAND STRATEGY, 24 FCC Rcd 12792, 12802 (para. 15) (2009).

¹⁴ Joint Statement on Broadband, GN Docket No. 10-66, FCC 10-42 (rel. Mar. 16, 2010) at para. 3 (finding that “[e]very American should have a meaningful opportunity to benefit from the broadband communications era—*regardless of geography*, race, economic status, disability, residence on tribal land, or degree of digital literacy”) (emphasis added). In addition, OBI emphasized in the Broadband Plan that the Commission must revamp its universal service policies to promote and enhance the deployment of mobile broadband in rural areas. *See, e.g.*, Broadband Plan at 144-45, 146 (discussing the recommended establishment of a Mobility Fund to support deployment of 3G networks).

Congressional leaders have also recognized the importance of broadband for rural consumers. *See* Rep. Rick Boucher, “Broadband Essential to Rural America,” Politico (Mar. 22, 2010), accessed at <http://www.politico.com/news/stories/0310/34723.html> (noting that “[b]roadband is a bridge from remote rural communities to the American economic mainstream. But many large areas in rural America are still served only by dial-up Internet connections.”).

¹⁵ 700 MHz Second Report and Order, 22 FCC Rcd at 15316 (para. 64).

¹⁶ *Id.* at 15348 (para. 154).

MHz Band.”¹⁷ Finally, the Commission indicated that it had designed its licensing and band plan rules in a manner intended to minimize the likelihood that large wireless carriers “would be able to behave in an anticompetitive manner as a result of any potential acquisition of 700 MHz spectrum.”¹⁸

B. Action by the Commission Is Needed To Protect and Advance Its Policies for Utilization of 700 MHz Spectrum for the Benefit of Consumers in Rural Areas.

The Alliance’s Petition identifies problems that threaten to derail the Commission’s goal of encouraging use of the Lower A Block by small rural and regional carriers to bring mobile broadband to unserved and underserved rural areas. To facilitate this use, small rural and regional wireless carriers need access to affordable mobile devices that their customers can use both in the Lower A Block and in other paired commercial 700 MHz frequency blocks.

The problem is that it is very unlikely that small rural and regional carriers holding Lower A Block licenses will be able to obtain and distribute these affordable mobile devices. Although it appears to be the case that efforts are now well under way to produce equipment capable of operating in the Lower B and C Blocks, and in the Upper C Block, there do not appear to be any plans for producing equipment for Band Class 12 (for operation in the Lower A, B, and C Blocks), or for producing mobile devices that will operate both in the Lower A Block and the Upper C Block.

This situation has developed, RCA believes, because in this case the market is not functioning in a manner that is producing results consistent with, and in advancement of, the Commission’s policies for using 700 MHz spectrum to bring mobile broadband to rural consumers. The sheer size of AT&T and Verizon Wireless—their customer base, their revenues, their share

¹⁷ *Id.* at 15325 (para. 85) (footnote omitted).

¹⁸ *Id.* at 15384 (para. 256).

of the wireless market, the substantial scope of their integrated operations—is having the effect of skewing the manner in which Band Classes have been established for the 700 MHz spectrum and has affected the current production plans for mobile devices usable in the 700 MHz band.

The fact is that Band Class 13 (Upper C Block) is tailored to accommodate Verizon Wireless’s 700 MHz holdings, while Band Class 17 (Lower B Block and Lower C Block) aligns with AT&T’s 700 MHz licenses. According to the Alliance, those carriers are moving forward with orders for mobile devices that will operate in those Band Classes.¹⁹ Meanwhile, there is little likelihood that any bulk equipment orders will be placed for Band Class 12 (Lower A Block, Lower B Block, and Lower C Block), which threatens to deprive small rural and regional carriers of any viable options for utilizing the Lower A Block to deploy affordable, ubiquitous mobile broadband services to rural customers.

AT&T, Verizon Wireless, and other parties have claimed that there are benign and practical explanations for the way the Band Classes have been configured, and for the way in which mobile devices are being designed and produced for utilization in those Band Classes. RCA will examine the reasonableness of these claims in the following sections.

Before turning to these parties’ arguments, however, it is important to focus on the risks posed by the *status quo*. First, up until this point, the Commission’s plans for utilization of the Lower A Block have proceeded as the agency had expected. The configuration of the Lower A Block encouraged small rural and regional wireless carriers, such as members of the Alliance, to bid for and acquire Lower A Block licenses, with the intent of using the spectrum to deploy mobile broadband in rural areas.

¹⁹ Petition at 3.

Although the valuation of the Lower A Block spectrum is affected by various factors, a principal factor that set the value of the spectrum was the assumption that affordable mobile devices would be available for use in the Lower A Block. Now that this assumption is hanging in the balance, for the reasons presented by the Alliance in its Petition, there is a risk that the value of the Lower A Block spectrum in rural areas will plummet. Any such diminution of the value of the Lower A Block spectrum in rural areas would adversely affect any near-term efficient use of the spectrum.

Second, roaming would be negatively affected if the *status quo* is not altered. If mobile devices that will operate in the Lower A, B, and C Blocks, and in Lower Block A and Upper Block C, and not available at affordable prices, then AT&T customers and Verizon Wireless customers would not be able to roam in areas served by small rural and regional carriers using Lower A Block spectrum. The same would be true, of course, for these small and regional carriers' customers when they are in areas served by AT&T or Verizon Wireless using 700 MHz spectrum.

This issue of roaming is of critical importance to RCA because its member carriers' rural customers are dependent upon roaming agreements for the provision of seamless communications whenever they are traveling or working outside their home service areas. The absence of a roaming capability significantly detracts from the value of the service that RCA's member carriers are able to provide to their customers. The ability of RCA's member carriers to fully utilize 700 MHz spectrum in providing service to their customers would be compromised if mobile devices lacked a roaming capability across 700 MHz frequency blocks.

The Broadband Plan also has explained that the absence of roaming capabilities is problematic for consumers:

Data roaming is important to entry and competition for mobile broadband services and would enable customers to obtain access to e-mail, the Internet and other mobile broadband services outside the geographic regions served by their providers. For example, small rural providers serve customers that may be more likely to roam in areas outside their providers' network footprints.²⁰

Third, one of the objectives behind the Commission's configuration of the Lower A Block is to encourage investment by small rural and regional carriers in mobile broadband deployment in rural areas. Part of that investment—the acquisition of licenses in the auction process—has been made. But the ability of these carriers to invest in the construction and deployment of mobile broadband infrastructure is now being placed in jeopardy because of the problems associated with the unavailability of affordable mobile devices. This cloud over the business plans of small rural and regional licensees for the use of Lower A Block spectrum threatens to deprive rural consumers of access to affordable mobile broadband services.

Finally, these various problems associated with the lack of any development and production of mobile devices capable of operation in the Lower A Block and other paired commercial blocks in the 700 MHz band also raise serious competitive implications. As a general matter, small rural and regional wireless carriers welcome the opportunity to compete with the larger wireless carriers, because these smaller carriers have shown the ability to compete effectively on price, customer service, and service quality. But if AT&T and Verizon Wireless are able to place their hands on the scale by benefiting from the lack of affordable mobile devices for use in the Lower A Block, this will affect the ability of small rural and regional carriers to compete, because they will lose revenues, they will find it more difficult to attract investment capital, and, ultimately, their ability to attract and retain customers will be eroded.

²⁰ Broadband Plan at 49.

This is not a scenario the Commission had in mind when it designed its band plan for 700 MHz spectrum.²¹ If the *status quo* is not altered, small rural and regional wireless carriers will be less able to compete against the large wireless carriers, the Lower A Block spectrum will be devalued, consumers will have fewer roaming options, and small rural and regional Lower A Block licensees will face high hurdles in attempting to deploy broadband infrastructure utilizing 700 MHz spectrum in rural areas.

C. Attempts by Large Wireless Carriers and Other Parties To Defend the Status Quo Are Not Persuasive.

AT&T, Verizon Wireless, and other parties contend that there are logical reasons for a *status quo* in which mobile devices for the 700 MHz band that conform with the business needs and strategies of AT&T and Verizon Wireless will continue to move toward development and production, while equipment necessary for efficient utilization of the Lower A Block does not make it onto the drawing boards. These parties also argue that, if the Alliance is not content with the *status quo*, its members have all the tools they need to move the ball in a different direction. RCA explores these contentions in the following sections, and finds them to be unpersuasive.

1. Efforts To Defend the Standard-Setting Process for the Use of 700 MHz Spectrum Are Neither Convincing nor Relevant.

Verizon Wireless attempts to demonstrate the soundness of the LTE standard-setting process for the 700 MHz band by arguing that the process was open and transparent, that it

²¹ In fact, two Commissioners expressed competitive concerns regarding the Commission's decisions for licensing the 700 MHz band. See *700 MHz Second Report and Order*, 22 FCC Rcd at 15562 (Statement of Commissioner Michael J. Copps, Approving in Part, Concurring in Part) (noting that "now we live in a world where the two leading wireless companies are owned in whole or in part by the leading wireline telephone companies"); *id.* at 15572 (Statement of Commissioner Robert M. McDowell, Approving in Part, Dissenting in Part).

evaluated proposals based on their technical merits, and that it produced Band Classes that resulted from non-controversial proposals.²²

In RCA's view, however, it is not unreasonable to conclude that the market position and purchasing power enjoyed by AT&T and Verizon Wireless had a bearing on the decisions made in establishing the 700 MHz Band Classes. But, even assuming, *arguendo*, that AT&T and Verizon Wireless exerted no influence over the deliberations and decisions of the standard-setting body, the fact remains that the product of the 3GPP process speaks for itself—it is demonstrably beneficial to AT&T and Verizon Wireless, as well as harmful to small rural and regional Lower A Block licensees and their customers. The Commission does not need to make any judgments about the integrity of the standard-setting process in order to conclude that the outcome of that process threatens to undermine the Commission's rural broadband goals and policies.

Verizon Wireless also contends that the Alliance should not be heard to criticize the workings of 3GPP because none of the Alliance's members chose to participate in the process.²³ RCA, however, is not as sanguine as Verizon Wireless that participation by Alliance members could have significantly affected the results of the 3GPP process. In any event, it is unclear how this lack of participation has any relevance in evaluating the merits of the Alliance's arguments about the problems caused by the Band Class plan for rural consumers and wireless broadband competition. As RCA has discussed, the Band Class plan—as it has been established—poses obstacles for the realization of the Commission's policies for utilization of 700 MHz spectrum, and the decision by Alliance members not to participate in the standard-setting process does not somehow preclude them from requesting that the Commission examine these obstacles and take necessary action.

²² See Verizon Wireless Letter at 3.

²³ See *id.*

Finally, Verizon Wireless also attempts to defend the standard-setting process by arguing that “[t]he fact that 3GPP has established various Band Classes for the LTE standard does not compel any service provider or any device manufacturer to use any particular class, or to limit devices to operation in only one class.”²⁴ According to Verizon Wireless, “[e]ach provider deploying LTE must determine which of the classes or combinations of classes is best suited to meet its authorized spectrum requirements and its business plans.”²⁵

These arguments imply that small rural and regional carriers are on an equal footing with large wireless carriers like AT&T and Verizon Wireless as the small carriers attempt to develop business plans and make business decisions regarding their use of 700 MHz spectrum. Such a view, however, ignores the reality of the marketplace. The reality is that—in the absence of Commission intervention to require that 700 MHz mobile equipment must be capable of operating on all paired commercial 700 MHz frequency blocks—small rural and regional carriers are not in a position to bear the expense associated with working out arrangements with equipment manufacturers to supply mobile devices for these carriers’ customers that work on the Lower A Block as well as other paired commercial frequency blocks in the 700 MHz band.

Small rural and regional Lower A Block licensees cannot generate purchases for mobile devices that are operable in all the paired commercial frequency blocks in sufficient quantity to make the mobile devices affordable to their customers. As RCA has discussed, this inability places these carriers at a competitive disadvantage, and also threatens to undermine the Commission’s broadband policies with respect to deployment in unserved and underserved rural areas. The rulemaking urged by the Alliance would enable the Commission to determine the extent to which the policies driving its licensing of 700 MHz spectrum would be jeopardized if small rural

²⁴ *Id.*

²⁵ *Id.*

and regional carriers—that have made relatively substantial investments in the Lower A Block spectrum—cannot pursue viable business plans for broadband deployment because of the unavailability of affordable mobile devices.

2. Verizon Wireless Wants Its Business Plan, Not the Commission’s Policies, To Control the Utilization of 700 MHz Band Spectrum.

Verizon Wireless explains that, not surprisingly, its business operations have dictated its decisions regarding the types of mobile devices it wants to be developed and produced for use in the 700 MHz band:

Verizon Wireless’ business needs require that it focus on devices that would operate on the three bands in which it will operate its EV-DO and LTE networks (850 MHz, 1.9 GHz, and 700 MHz), as well as several bands that are used in Europe and other parts of the world. Inclusion of these bands is necessary to facilitate interconnectivity between 3G and 4G networks and to promote greater scale economies for LTE equipment.²⁶

Verizon Wireless goes on to point out that “[e]ach of these bands requires a separate duplexer, and thus, each adds increased complexity and cost to wireless devices.”²⁷ Verizon Wireless wants these increased costs to be incurred for mobile devices that will operate on the Upper C Block band and on spectrum outside the 700 MHz band, and it provides this explanation for its choice:

Given that Verizon Wireless does not plan to deploy its Lower A Block spectrum in the near term, it makes no sense for it (or its 4G customers) to bear the burden of additional cost associated with including that band in its initial LTE devices, or for its customers to sacrifice the benefits they will gain from greater roaming capability and lower equipment costs in order to include a band that is not needed at this time.²⁸

²⁶ *Id.* at 7.

²⁷ *Id.*

²⁸ *Id.*

Verizon Wireless thus has been very candid in framing the issue: The question for the Commission is whether use of 700 MHz spectrum for the deployment of mobile broadband should be driven by Verizon Wireless's business plan. RCA believes that it should not.

Verizon Wireless makes it evident in its *ex parte* letter that it is warehousing its Lower A Block spectrum "in the near term,"²⁹ that, for its purposes, roaming between the 700 MHz band and other bands is more important than roaming within the frequency blocks of the 700 MHz band, and that producing mobile devices that work in Europe and other foreign locations is more important than producing devices that work in unserved and underserved areas in rural America.

As RCA has discussed, the Commission's licensing plan for 700 MHz spectrum is intended to promote the agency's policies of deploying broadband in rural areas and creating investment and service opportunities for small rural and regional carriers. Verizon Wireless's approach to the development of mobile devices that will operate in the 700 MHz band (an approach that is mirrored by AT&T) makes it clear that the marketplace—including the 3GPP standard-

²⁹ When Verizon Wireless does turn its attention to utilization of Lower A Block spectrum, it may not focus on unserved and underserved rural areas. It has indicated that it "holds 25 A Block licenses for markets that cover over half the U.S. population. Verizon Wireless paid nearly \$2.57 billion for these licenses, which cover major metropolitan markets such as New York, Los Angeles, Philadelphia, Washington, DC, and Miami, among others." Verizon Wireless Reply Comments at 86.

Verizon Wireless's emphasis on major urban markets is consistent with Verizon's plans on the wireline side of its business to de-emphasize its commitment to providing service in rural areas. For example, in May of last year Verizon announced a deal with Frontier Communications Corp. in which Verizon plans to sell approximately 4.8 million mostly rural telephone lines in 14 states. *See* Tim Landis, *Hearing Officer Recommends Rejection of Verizon Sale*, THE STATE JOURNAL-REGISTER, Mar. 9, 2010, accessed at <http://www.sj-r.com/business/x2102348330/Hearing-officer-recommends-rejection-of-Verizon-sale>; Walt Williams, *Sale of Verizon's Landlines May Mean New Era of Communications in State*, THE STATE JOURNAL, Sept. 16, 2009, accessed at <http://www.statejournal.com/story.cfm?func=viewstory&storyid=66718>; Tian Huang, *Frontier Plans Bonds as Treasury Yields Rise: New Issue Alert*, BLOOMBERG.COM, Mar. 25, 2010, accessed at <http://www.businessweek.com/news/2010-03-25/frontier-plans-bonds-as-treasury-yields-rise-new-issue-alert.html>; Saul Hansell, *Verizon Boss Hangs Up on Landline Phone Business*, N.Y. TIMES, Sept. 17, 2009, accessed at <http://bits.blogs.nytimes.com/2009/09/17/verizon-boss-hangs-up-on-landline-phone-business/> (noting that "Verizon is selling off most of its operations in rural areas").

setting process and the equipment production decisions of mobile device manufacturers—is not a friendly environment for the Commission’s policies.

The large wireless carriers and wireless equipment manufacturers cannot be faulted for making decisions based on their own business interests, as opposed to being the keepers of the Commission’s 700 MHz policies aimed at benefiting rural consumers. But, as the Alliance argues in its Petition, this is precisely why the Commission should initiate a rulemaking proceeding. If the Commission is concerned about the fate of its policies promoting mobile broadband deployment in rural areas and creating opportunities for small rural and regional wireless carriers, then the Commission should initiate the rulemaking requested by the Alliance.

The issue of duplexers for 700 MHz mobile devices illustrates the point. Verizon Wireless has explained that it wants mobile devices that will work in the Upper C Block “as well as several bands that are used in Europe and other parts of the world.”³⁰ The standard-setting process, and the development and production of mobile devices, have been marching to this tune. A rulemaking proceeding, however, could examine whether there should be a different playlist. RCA urges the Commission to evaluate whether its 700 MHz spectrum policies would be better served if duplexers are used to make mobile devices capable of operating across the various paired commercial frequency blocks in the 700 MHz band, instead of being utilized in a way that furthers Verizon Wireless’s global business.

Finally, as the Alliance makes clear in its Petition, action by the Commission in a rulemaking proceeding to ensure that its spectrum utilization policies take priority over the large carriers’ business plans would not be without precedent. At the time the Commission decided to license two separate cellular systems in each market, it also concluded that a competitive market

³⁰ Verizon Wireless Letter at 7.

structure could be enhanced by requiring that “all mobile stations to be authorized must be capable of operating over the entire allocated band”³¹ RCA supports the Alliance’s suggestion that a similar action by the Commission here would help to promote the competitive use of 700 MHz spectrum.

3. Claims That the 700 MHz Band Class Plan Was Driven by Technical Constraints Should Not Deflect the Commission from Examining the Alliance’s Concerns in a Rulemaking Proceeding.

The large wireless carriers and other parties opposing the Alliance’s Petition emphasize their view that a rulemaking proceeding is not necessary, and would not serve any useful purpose, because the boundaries of the 3GPP Band Class plan were set by technical constraints.

RCA demonstrates in the following sections that, while issues regarding technical limitations are important, a rulemaking would serve to bring these issues into better focus and would also balance these technical issues against other relevant considerations, such as the Commission’s policies regarding utilization of 700 MHz spectrum for the deployment of mobile broadband in rural areas.

a. Opponents of the Alliance’s Petition Overstate Their Claim That the Band Classes Should Not Combine Upper and Lower 700 MHz Bands.

Verizon Wireless argues that, contrary to the Alliance’s claims that AT&T and Verizon Wireless manipulated the standard-setting process, in fact none of the 3GPP Band Classes for LTE combines Upper 700 MHz and Lower 700 MHz bands because of technical constraints on handset designs resulting from the Commission’s licensing plan.³²

³¹ Petition at 10 (citing *Cellular Communications Systems*, CC Docket No. 79-318, Report and Order, 86 FCC 2d 469, 482 (1981)).

³² Verizon Wireless Letter at 5; see AT&T Reply Comments at 71-72.

Verizon Wireless concedes, however, that it is possible to support both Upper and Lower 700 MHz bands in the same device by using multiple duplexers, but claims that, “[w]hile it is possible to build a device with multiple duplexers, this would impose additional cost and complexity that must be weighed against other factors, including whether other bands outside 700 MHz can be included in the device.”³³

RCA would agree that, in the typical case, weighing the factors described by Verizon Wireless is an exercise that should be left to the industry and standard-setting bodies. But, in this case, too much is at stake. The Commission attempted to design a licensing plan that would give small rural and regional carriers a realistic opportunity to invest in 700 MHz spectrum in order to deploy mobile broadband in unserved and underserved rural areas. If that policy is being placed in jeopardy by the 3GPP Band Class plan—which RCA believes to be the case—then a Commission rulemaking should be conducted in order to ensure that these factors are weighed in a manner that best serves the public interest.

b. Arguments Advanced by Opponents of the Alliance’s Petition Illustrate the Risks Involved If the Commission Does Not Make Its Own Assessment of How Interference Problems Should Be Addressed.

In arguing against initiation of a rulemaking proceeding, Verizon Wireless contends that various interference problems (*i.e.*, high-power broadcast services operating in the Lower D and E blocks; broadcast TV services operating on channel 51) create “technical challenges in deploying Band Class 12 [Lower Blocks A, B, and C] equipment at this time.”³⁴ But Verizon Wireless

³³ Verizon Wireless Letter at 5.

³⁴ *Id.* at 6; *see* Qualcomm Letter at 4. Verizon Wireless also has maintained elsewhere that technical issues are driving the production of 700 MHz mobile devices. It maintains in its Reply Comments in the Mobile Competitive Market Conditions proceeding that “the open standards process and the technical complexities of the A Block account for the pace of A Block equipment development” Verizon Wireless Reply Comments at 86. The dubious nature of these claims, however, is revealed by other observations made by Verizon Wireless in its *ex parte* letter. For example, as RCA has discussed, Verizon

goes on to reveal that the issue really is not about interference. It candidly concedes that the interference issues it identifies “are not insurmountable”³⁵ and it then proffers its solution to these issues:

[N]othing prevents members of the Alliance from themselves determining how to address these issues in designing Band 12 devices. Indeed, the Alliance members are free to work (either collectively or individually) with manufacturers to build devices that operate on the spectrum its members voluntarily acquired, and those devices could include other spectrum besides Band Class 12. But [t]hose [*sic*] decisions have to be made by those carriers to meet their own individual business plans. Verizon Wireless has nothing to do with those decisions.³⁶

Verizon Wireless’s casual assertion that “nothing prevents” Alliance members from seeking their own solutions to the Band Class 12 interference issues goes to the core of the problem addressed in the Alliance’s Petition. Verizon Wireless is *not* suggesting that interference issues make it *impossible* to develop mobile devices that work across various paired commercial bands and that deal effectively with interference. Instead, Verizon Wireless takes the position that this is not its problem.

As a practical matter, members of the Alliance *are* prevented from working with manufacturers to design devices that are capable of operating across the various 700 MHz spectrum blocks. Although this may not be Verizon Wireless’s problem, RCA believes that it *is* a problem that merits the Commission’s attention in a rulemaking proceeding.

Mobile devices that solve the various interference issues present in the Lower A Block, and that also are capable of working in all the 700 MHz paired commercial blocks, will be costly

Wireless has stated that it has no near-term plans for utilizing its Lower A Block spectrum. Clearly, this warehousing decision has had an impact on “the pace of A Block equipment development.”

³⁵ Verizon Wireless Letter at 6.

³⁶ *Id.* (footnote omitted); *see* Verizon Wireless Reply Comments at 86-87, 91; AT&T Reply Comments at 72 (noting that “the decision by equipment manufacturers to prioritize Band 17 [Lower Blocks B and C] by no means prevents parallel development of equipment for Band 12 [Lower Bands A, B, and C]”) (footnote omitted).

if carriers are not able to purchase them in bulk. Small rural and regional carriers likely will not be able to order the mobile devices in sufficient bulk, because of the relatively small size of their customer base. Because of this, these carriers have no practical way of obtaining for their customers non-interfering mobile devices that operate in different paired commercial blocks in the 700 MHz band.

As RCA has explained, unless the Commission intervenes, the lack of these mobile devices will seriously impair the ability of Alliance members and other small rural and regional carriers to utilize their Lower Block A spectrum, which, in turn, will undercut the Commission's policies regarding spectrum efficiency and broadband deployment in unserved and underserved rural areas.

c. Claims That Granting Relief to the Alliance Would Require Modification of Chipsets Intended for Use in the 700 MHz Band Warrant Review by the Commission.

Qualcomm expresses concerns regarding the relief sought by the Alliance because, according to Qualcomm, if such relief is granted, Qualcomm's chipsets for use in the 700 MHz band would need to be augmented with front-end components, some of which are not currently made either by Qualcomm or other vendors. Qualcomm contends that:

As a result, a grant of the Petition would delay the availability of 700 MHz devices by an unspecified period of time and would drive up the costs of such devices by an unspecified amount. Such time delays and cost increases in bringing 700 MHz devices to market would certainly be detrimental to the American public.³⁷

RCA believes that Qualcomm and Motorola have raised concerns worthy of review, but these concerns do not compel the Commission to reject the Alliance's Petition. Given the Commission policies at stake with respect to utilization of the Lower A Block, RCA believes that the

³⁷ Qualcomm Letter at 3. *See* Motorola Comments at 1 (arguing that "a Commission action to require mobile devices to be capable of operation over all of the commercial blocks [*sic*] would significantly delay deployment of broadband services in the 700 MHz band").

Commission—not the marketplace—should decide what the period of delay and the level of costs cited by Qualcomm are likely to be, and whether these delays and costs are acceptable in order to give greater priority to the realization of the Commission’s objectives for rural broadband deployment and the creation of opportunities for small rural and regional carriers.

D. The Action Sought by the Alliance’s Petition Is Consistent with Recommendations Made in the Broadband Plan for Utilization of the 700 MHz Band by the Public Safety Community.

Thirteen years ago Congress directed the Commission to make spectrum in the 700 MHz band available to the public safety community.³⁸ Although the Commission’s efforts to fulfill this mandate have had a checkered history,³⁹ devising means by which 700 MHz spectrum can be used for public safety broadband applications continues to be a major Commission priority.

In this regard, the Broadband Plan stresses the importance of developing mobile devices that enhance utilization of 700 MHz spectrum by public safety agencies. The Plan emphasizes that “it is critical to develop commercial devices that can operate across 3GPP Band 14 [which includes the D Block and public safety spectrum] in its entirety.”⁴⁰ The Plan recommends that the Commission should “require the D block licensee(s), and potentially other 700 MHz commercial licensees, to develop and offer devices capable of providing service using all 700 MHz Band 14 spectrum and identify a path toward the large-scale production of such devices.”⁴¹ Importantly, the Plan also recommends that the Commission “should explore other ways to encour-

³⁸ See Broadband Plan at 315.

³⁹ See *id.* & n.5.

⁴⁰ *Id.* at 316.

⁴¹ *Id.*

age the deployment of public safety devices that *transmit across the entire broadband portion of the 700 MHz band* (i.e., Band 12, Band 13, Band 14 and Band 17).”⁴²

The rulemaking sought by the Alliance would work in tandem with the Commission’s efforts to pursue these recommendations made in the Broadband Plan. The Alliance has made its case that the development and production of mobile devices capable of working across the 700 MHz commercial frequency bands will further competition and facilitate broadband deployment in rural areas. Combining requirements for these capabilities with requirements for the development and production of public safety devices that operate across the 700 MHz frequency bands would further advance the Commission’s policies for utilization of the 700 MHz spectrum.⁴³

On the other hand, it is evident that the *status quo* is leading to an outcome considerably different from the goals for 700 MHz public safety devices articulated in the Broadband Plan. RCA believes the Commission should reject the *status quo* in favor of a better path: The Commission should require that two-way mobile devices operating in the Upper and Lower 700 MHz frequency blocks—for both public safety users and commercial users—must be capable of transmitting across all the frequency blocks.

IV. CONCLUSION.

The Alliance’s Petition has provided ample justification for the initiation of a rulemaking proceeding to enable the Commission to take action to prevent marketplace developments from eclipsing the Commission’s efforts to pursue spectrum policies for the 700 MHz band that accelerate the deployment of high-speed broadband services in unserved and underserved rural areas,

⁴² *Id.* (emphasis added).

⁴³ Although the Broadband Plan stops short of recommending that the Commission should establish *requirements* regarding the capabilities of public safety devices, RCA believes that requirements, rather than incentives or other forms of encouragement, would be necessary to ensure the large-scale production of fully operable public safety devices.

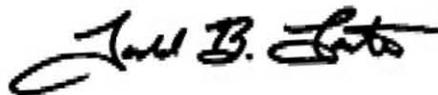
and that afford small rural and regional carriers with realistic opportunities to bring broadband to these areas.

Opponents of the Petition, while cloaking their motives behind a veil of claims about the transparency of the standard-setting process and concerns about the technical limitations that have constrained the development of equipment, have made it evident that their business objectives—and not Commission policies favoring mobile broadband deployment in rural areas—should dictate the manner and pace of equipment production.

RCA respectfully urges the Commission to grant the Petition and initiate a rulemaking to address the issues presented by the Alliance.

Respectfully submitted,

RURAL CELLULAR ASSOCIATION

A handwritten signature in black ink, appearing to read "Todd B. Lantor". The signature is fluid and cursive, with a large initial "T" and "L".

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