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

In the Matter of	)	
	)	
Fostering Innovation and Investment in the Wireless Communications Market	)	GN Docket No. 09-157
	)	
A National Broadband Plan For Our Future	)	GN Docket No. 09-51

In the Matter of	)	
	)	
Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993	)	WT Docket No. 09-66
	)	
Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless including Commercial Mobile Services	)	

Reply Comments of United States Cellular Corporation

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United States Cellular Corporation ("USCC") hereby files its Reply Comments in the above-captioned proceedings.

Introduction and Summary

Many valuable comments have been filed in response to the FCC's Notices of Inquiry ("NOIs")[1] reflecting the points of agreement and disagreements among wireless carriers. However, despite the voluminosity of their filings, USCC does not believe the case for pro-competitive reforms offered in our Comments and those of other small and mid-sized carriers has

[1] *See*, In the Matter of Fostering Innovation the Wireless Communications Market: A National Broadband Plan For Our Future; GN Docket NO. 09-157; GN Docket 09-51, Notice of Inquiry, FCC 09-66, released August 27, 2009 ("*Innovation NOI*"); In the Matter of Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, including Commercial Mobile Services, WT Docket No. 09-66, Notice of Inquiry, FCC 09-67, Released August 27, 2009, ("*Competition NOI*")..

been refuted by the arguments made by Verizon Wireless and AT&T.

Much of their comments are devoted to proving points which no one contests. USCC agrees, for example, that the wireless industry is still competitive at the retail level, and that it has been marked by a high degree of product innovation and technological evolution inspired, in part, by the FCC's wisely deregulatory approach over the past two decades. However, that is not the whole story.

In recent years, most of the competitors of the largest carriers have disappeared from the marketplace, and have been absorbed by those carriers. That is not an accident. It is, rather, a reflection of the growing market power of the largest four carriers, particularly AT&T Wireless and Verizon Wireless. The domination those carriers exercise over the wireless market can also be seen in statistics presented in this proceeding regarding new customer additions, and in the disparities in spectrum holdings between the largest carriers and all others. Small, mid-sized and rural carriers can still compete vigorously with their larger rivals, but their continued ability to do so is dependent on the FCC taking the reasonable and limited actions recommended by USCC and other carriers in these proceedings.

Among those actions are: (1) preserving small carrier access to spectrum through reasonably sized geographic licenses and fair auction processes; (2) establishing limits in a given market on the spectrum available to the largest carriers; (3) ensuring reasonable and cost-based "special access" rates; (4) requiring automatic roaming for data services and limiting the "in market exclusion"; (5) eliminating handset exclusivity arrangements; (6) taking action against tower siting delays; and (7) adopting universal service policies that advance the deployment of wireless in rural America. The FCC should also move forward with a re-auction of the Upper 700 MHz D Block using regional licensing, adoption of the LTE standard selected by public safety organizations and the principle of shared commercial/public safety use and public/private partnership.

USCC, however, agrees with virtually all wireless commenters, including AT&T and

Verizon Wireless, concerning the need to provide more spectrum for commercial mobile services, to maintain exclusive licensing for that spectrum and to protect all wireless spectrum from increased interference, including from wireless "repeaters" and possible "overlay" and "underlay" uses. The increased demand for spectrum generated by 3G and 4G systems, and the inevitable need to deploy more spectrum in close proximity to existing operations will make interference protection more, and not less, necessary.

I. The FCC Should Act to Protect The Rights of Small, Mid-Sized, and Rural Carriers and Their Customers

The central issue before the FCC in these proceedings is whether it should alter its current policies which have facilitated the emergence of two dominant wireless carriers. USCC's answer to that question is "yes" as described in our prior Comments.[2] That position receives support in the comments of other filers.

At the outset, it should be noted that much of the lengthy comments of the two largest carriers[3] are taken up with uncontroversial points. We agree that the wireless industry is still competitive at the retail level, and that its history has been marked by the development of new products, and by rapid technological evolution. However, their enumeration of new products, applications, and network configurations overlooks ominous trends, which threaten to make the wireless future much less competitive than the past.

A. The FCC Should Establish Limits on The Spectrum Available to the Largest Carriers

In our Comments, USCC cited the data on market concentration assembled by the Rural Telecommunications Group ("RTG") in Docket RM-11498, which demonstrated that wireless market concentration continues to increase. We further argued that current FCC policies,

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[2] Comments of United States Cellular Corporation, filed September 30, 2009, in GN Dockets 09-157, 09-51, WT Docket 09-66.

[3] See, e.g. Comments of Verizon Wireless in WP Docket 09-66, filed September 30, 2009. ("Verizon Wireless Competition Comments").

pursuant to which spectrum acquisitions are evaluated, have actually facilitated this trend, even as small and mid-sized carriers have been absorbed by their larger rivals.

These data and arguments have been powerfully reinforced by the facts and arguments developed by MetroPCS in response to the *Competition NOI*.[4] MetroPCS calls the roll of the now departed wireless carriers, and notes one consequence of consolidation, namely that approximately 92.2 percent of wireless telephone subscribers in the United States are now customers of AT&T, Verizon Wireless, Sprint Nextel, and T-Mobile.[5] Moreover, Verizon Wireless and AT&T Wireless alone account for 63 percent of all subscribers among the "top ten" carriers,[6] at a time when Sprint has been losing subscribers and T-Mobile's subscriber growth has been relatively flat.[7] At present, Verizon Wireless is unquestionably the dominant CDMA carrier and AT&T the dominant GSM carrier, facts which have huge consequences for everything from roaming negotiations to smaller carriers' ability to access new technologies on a timely basis.

Verizon Wireless and AT&T do not deny these facts. Rather, they attempt to bury them in a mass of data, some of it quite interesting, but much of it of dubious relevance. For example, in addition to praising the competitive offerings of its smaller wireless rivals and Clearwire, Verizon Wireless stresses the competition now allegedly provided to the national wireless carriers by MVNOs, by cable companies, mobile satellite providers, Direct Broadcast Satellite ("DBS") networks, and mobile VOIP providers, as well as from wireline telephone companies and retail stores offering Wi-Fi access.[8] These companies do exist and certainly serve certain markets, but how many Americans wanting domestic wireless service sign up with a mobile satellite carrier? Verizon Wireless also notes that the U.S. wireless market is less concentrated than the market in

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[4] *See*, Comments of MetroPCS Communications, Inc. in W.T. Docket 09-66, filed September 30, 2009, ("MetroPCS Competition Comments") pp. 1-14.

[5] Ibid., p. 6.

[6] Ibid., p. 7.

[7] Ibid., p. 8.

[8] Verizon Wireless Competition Comments, pp. 21-41.

most foreign countries, but fails to note that most of these counties used to have national telephone monopolies and still have national licensing of wireless systems.[9]

Moreover, accordingly to Verizon Wireless, a "slavish" reliance on the Herfindahl-Hirschman Index and other traditional measures of market concentration is ill advised when it comes to the U.S. wireless markets, given their "robustly competitive" character as reflected by price reductions and quality of service. [10] The FCC should be skeptical of such self-serving claims. AT&T also stresses the wireless industry's dynamic and innovative nature and the competitive character of wireless retail, device, and "edge" markets.[11]

However, neither Verizon Wireless nor AT&T comes to grips with its own market power relative to other carriers, and what that means for the future of wireless competition. Rather, they are content to repeat the maxim that it is the FCC's duty under the public interest standard to protect efficient competition, not competitors.[12] The difficulty is that efficient and robust competition still requires the existence of healthy competitors and current structural disparities in the wireless marketplace are driving out the actual competitors of the largest carriers, as evidenced by the extinction or imminent departure from the industry of Dobson, SunCom, Aloha, Rural Cellular Corporation, Midwest Wireless, Western Wireless, Alltel, and Centennial. If the FCC wishes to prevent this list from growing longer, it should take the actions discussed in USCC's prior comments and below.

As discussed in Section IV below, all wireless carriers agree that there is a present shortage of wireless spectrum, and that this shortage will become acute as 4G networks are developed and consumer use of advanced data services takes up an ever greater amount of bandwidth. CTIA suggests that 800 MHz be made available over time for wireless use and we

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[9] Ibid., pp. 42-47.

[10] Ibid., pp. 13-17.

[11] Comments of AT&T, Inc. in WT Docket No. 09-66, ("AT&T Competition Comments"), pp. 8-41.

[12] Bell Atlantic Mobile Systems and NYNEX Communications Co., Memorandum Opinion and Order. 12 FCC Rcd. 22280, 22288, ¶16, quoted in Verizon Wireless Competition Comments, p. 11.

agree that this is a laudable goal.[13] However, history demonstrates that, even when a decision is made to redeploy spectrum, it takes many years to bring the decision into practical effect. In the intervening period, the non-dominant carriers will be denied the spectrum they need to remain competitive[14]

As demonstrated by Sprint,[15] the amount of spectrum available in the near term for wireless is relatively small. It includes:

- The AWS-2 H Block (1915-1920 MHz and 1995-2000 MHz);
- The AWS-2 J Block (2020-2025 MHz and 2175-2180 MHz);
- The Upper 700 MHz D Block (758-763 MHz and 788-793 MHz); and
- The AWS-3 band (2155-2175 MHz).

Each of these spectrum blocks is part of a complex proceeding which is yet to be completed.[16] Those proceedings should be concluded and the spectrum should be made available for commercial use, in a manner that creates opportunities for small and mid-sized carriers and ensures appropriate interference protection for nearby bands already in service. Other commenters, including T-Mobile, have also proposed a possible additional allocation of government spectrum in the 1755-1800 MHz band, which would be a natural complement to the currently unpaired AWS-3 band.[17]

However and whenever the FCC allocates this spectrum to commercial use, it cannot follow its practice in recent auctions, configuring some licenses in mega-regions that are

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[13] *See*, e.g., Comments of CTIA in GN Dockets No. 09-157, and 09-51 filed September 30, 2009, ("CTIA Innovation Comments") p. 72.

[14] *See*, September 29, 2009, Commission Open Meeting Presentation on the Status of the Commission's Processes for the Development of a National Broadband Plan, p. 73 (depicting the multiyear time periods taken to reallocate spectrum for the cellular, PCS, 700 MHz, and AWS-1 services)

[15] See Comments of Sprint Nextel Corporation in GN Dockets 09-157, 09-51, filed September 30, 2009, ("Sprint Innovation Comments"), p. 3.

[16] USCC discusses its proposed rules for the D Block infra, at pp. 16-19.

[17] Comments of T-Mobile USA, Inc., in GN Docket Nos. 09-157 and 09-51, and WT Docket No. 09-66, filed September 30, 2009, ("T-Mobile Comments"), p. 4.

accessible only to the largest carriers and then simply allowing the licenses to be sold to the highest bidder. Doing so will only further entrench the dominant position of AT&T Wireless and Verizon Wireless. MetroPCS makes note of the results of Auction 73, where the last sub-1GHz spectrum for the foreseeable future was offered.[18] In this auction, which concluded in March 2008, "AT&T Wireless and Verizon Wireless bought $16 billion of the $19 billion worth of licenses, acquiring the overwhelming majority of the available spectrum."[19] We submit that the only way to prevent this being repeated in the future is by limiting the amount of spectrum which any carrier can hold or acquire at auction on a market by market basis. This could be done by some form of spectrum cap for all spectrum below 2.3 GHz, as recommended by RTG[20] or through some other means.

USCC has not indicated its support for any particular form of spectrum limitation, but it urges the FCC to consider the issue in a separate proceeding. Spectrum is the fundamental input of our industry and U.S. Cellular firmly believes that spectrum share limits lead to market share limits. Unless the issue of spectrum disparity is addressed in some way, all other measures to protect competition are likely to be ineffective.[21] We note that NTELOS, a Virginia and West Virginia wireless carrier, states in its comments that its average spectrum holdings in its Virginia markets are 23 MHz, and in its most important markets, 20 MHz. In contrast Verizon Wireless holds 90 MHz in those markets and NTELOS was quickly "priced out" of the eastern Virginia markets in recent auctions. This is not a sustainable situation for NTELOS or wireless

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[18] As we note later in these comments, the Commission still has an opportunity ensure that the Upper 700 MHz D Block is deployed in a way that facilitates competition and commercial use while enabling an interoperable network for the public safety community.

[19] MetroPCS Competition Comments, pp. 15-16.

[20] Comments of Rural Telecommunications Group, Inc. in GN Docket No. 09-157, 09-51, filed September 30, 2009, ("RTG Innovation Comments"), pp. 4-5.

[21] *See, e.g.* Comments of NTELOS in WT Docket No. 09-66, filed September 30, 2009 ("NTELOS Competition Comments"), pp. 7-9.

competition generally.[22]

B. The FCC Must Address The Issue of Special Access Rates

USCC's Comments in these proceedings (pp. 11-19) demonstrated that the market for "backhaul" services does not now provide effective competitive alternatives to incumbent local exchange carriers' ("ILECs") special access services. USCC further argued that deregulation and ineffective regulation of special access services have resulted in excessive backhaul rates for wireless carriers, far exceeding ILEC costs, and unjustifiably high profits for ILECs. USCC urges that the FCC initiate a focused and time-sensitive data request on this issue, reform the pricing flexibility "competitive triggers" which govern ILEC special access prices, act to lower the current unjustifiable special access charges, and also address anti-competitive terms and conditions on existing discount plans.

Backhaul reform has received strong support in other comments. T-Mobile, for example, notes the impact of anti-competitive backhaul practices on wireless innovation, and urges the FCC to take actions similar to those recommended by USCC.[23] Sprint's comments summarize evidence previously submitted regarding how inflated special access changes raise tower construction costs, discourage investments, and reinforce the competitive advantage of AT&T Wireless and Verizon Wireless, owing to their common ownership with large ILECs.[24] Sprint also provides a useful chart which demonstrates that the ILECs' share of special access revenue has remained "essentially unchanged" over the last decade, solid evidence that this problem will not solve itself.[25]

The attempts by Verizon Wireless and AT&T to defend Verizon's and AT&T's backhaul practices, while not surprising given their affiliation with the Nation's two largest suppliers of

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[22] Ibid., pp. 7-8.

[23] See T-Mobile Comments, pp. 26-28.

[24] Comments of Sprint Nextel Corporation in GN Docket Nos. 09-157, 09-51, filed September 30, 2009, ("Sprint Innovation Comments"), pp. 28-31.

[25] Ibid., pp. 32-33.

special access, are, nonetheless, unconvincing. Verizon Wireless stresses allegedly increased competition for backhaul services and quotes other carriers' officers regarding the alleged ease of obtaining backhaul services.[26] Presumably those carriers will clarify the context of those comments on reply. AT&T argues that retail wireless competition proves that there is "effective competition for wireless backhaul."[27] As additional proof AT&T also cites statements by Sprint and T-Mobile executives regarding wireless competition, even though those companies oppose AT&T's position on this subject.[28] Lastly, AT&T cites actions by Cox, Fibertower and other competitive suppliers to the affect that they are providing competitive backhaul alternatives.[29]

Of course those latter developments, welcome as they are, have not had any real effect on ILEC dominance of this market, as reflected in the statistics assembled by T-Mobile, which the increased need for backhaul capacity for data services will only solidify. Conspicuous by its absence in the discussions of Verizon Wireless or AT&T is any discussion of either the costs of or profits enjoyed by their ILEC affiliates from providing this bottleneck service. We renew our request for FCC action.[30]

C. The FCC Should Expand the Automatic Roaming Rule to Include Data Services and Should Limit the In-Market Exclusion

In our Comments (pp. 14-17), as in prior proceedings, USCC expressed its support for broadening the automatic roaming obligation to include digital services not interconnected with the public switched telephone network. We also encouraged the FCC to consider limitation of the "in market" exception to the FCC's roaming requirement now set forth in Section 20.12(d) of the FCC's Rules, perhaps with a reasonable time limit to encourage system build-out. At a time when

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[26] Verizon Wireless Competition Comments, pp. 95-100.

[27] Comments of AT&T Inc. in WT Docket No. 09-66, filed September 30, 2009 ("AT&T Competition Comments"), pp. 83-84.

[28] Ibid., pp. 84-86.

[29] Ibid., pp 86-88.

[30] *See*, "Genachowski Announces Agenda To Spur 4G Wireless Service," TR Daily, October 7, 2009, pp. 1-4.

Verizon Wireless and AT&T Wireless dominate the GSM and CDMA roaming markets (a dominance very likely to extend into the 4G world) and when data is supplanting voice as the main engine of wireless growth, those rule modifications are now more necessary than ever.

Roaming reform drew widespread support from the great majority of wireless carriers of all sizes.[31] MetroPCS, for example, pointed to: (a) the importance of carriers' being able to offer nationwide service to survive in today's marketplace; (b) roaming's link to public safety and warning capabilities; (c) the importance of roaming rights to carrier willingness to invest in 4G technology; and (d) the illogic of assuming that carriers requesting roaming will not build out purchased spectrum as existing government uses are cleared. MetroPCS also noted how critical data roaming will be in a 4G environment.[32]

In response, Verizon Wireless and AT&T fall back on their traditional, essentially non-responsive arguments. Verizon Wireless stresses that its roaming rates have fallen, reflecting a fall in roaming revenues nationwide as a percentage of total revenues. It also refers briefly to the "buildout" argument.[33] However, such arguments do not deal adequately with the right to roam of the customers of small and mid-sized carriers and the importance to the survival of such carriers of being able to offer nationwide roaming. Verizon Wireless also refers to its willingness to negotiate data roaming agreements. However, we would maintain that the FCC should establish the principle all carriers should be obligated to negotiate such agreements in good faith.

AT&T takes a somewhat harder line, sticking to the traditional arguments that carriers should be free to enter into roaming agreements based solely on the principle of commercial advantage and that the FCC complaint process is sufficient to rectify any possible anti-

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[31] *See*, e.g. T-Mobile Comments, pp. 24-26; Comments of RCA in Docket 09-66, filed September 30, 2009, ("RCA Competition Comments"), pp. 11-14; NTELOS Competition Comments, pp. 6-7; MetroPCS Competition Comments, pp. 24-35.

[32] *See*, e.g. MetroPCS Competition Comments, pp. 24-35.

[33] Verizon Wireless Competition Comments, pp. 57-58. Verizon Wireless does however, also refer to its compromise proposal of two years of "home roaming," a welcome proposal, which the FCC should treat as a serious opening offer.

competitive behavior.[34] AT&T also maintains that both in market and data roaming would diminish investment on the part of all carriers concerned and injure carriers' ability to manage their networks.[35] USCC and other carriers endorsing these principles have never argued that carriers should not maintain control of their networks or that they should be forced to undertake expensive reconfigurations of their networks to accommodate roamers. What we ask is reasonable network adjustments to accommodate roaming, that is, for carriers to meet each other halfway and thus serve the public interest. To the extent that doing so would be facilitated by industry standards work, the FCC should strongly encourage such work and should lend its support to solutions based on such standards. We also strongly believe that the FCC should reiterate that any data roaming requirements should continue to apply to 3G, 4G and all future improvements in wireless technology. We believe that these issues are now ripe for action.

D. The FCC Must Review The Impact of Handset Exclusivity Arrangements

USCC (Comments, pp. 9-11) argued that "exclusive" arrangements for the most desirable handset models is one of the most important ways in which the largest wireless carriers reinforce their competitive advantages. Such exclusive controls not only negatively affect smaller carriers, they also disadvantage the rural areas which smaller carriers serve and larger carriers often do not serve or serve with limited network coverage and retail distribution. Ending handset exclusivity will promote wireless competition, expand access on the part of all Americans to advanced applications, and spur broadband development.

RCA describes the sheer magnitude of this problem, noting that of the fifty most popular handsets, forty-six are the subject of exclusive arrangements between "Big Four" carriers and handset manufacturers.[36] RCA then points to two significant anticompetitive results of this market imbalance. First, since many customers choose carriers based on the handsets they offer,

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[34] AT&T Competition Comments, pp. 89-91.

[35] Ibid., pp. 91-93.

[36] RCA Competition Comments, p. 6.

exclusive contracts for handsets can render irrelevant a smaller carrier's best efforts to compete on price, service quality, or network reliability.[37] Second, exclusive contracts are a significant barrier to entry, since they make it virtually impossible for a new entrant to compete effectively with the established carriers, as they are guaranteed to lose in one crucial competitive area.[38] RCA urges consideration of this issue in the upcoming 2009 Mobile Wireless Competition Report and USCC concurs in that request, with the expectation that the Report would provide a basis for near-term Commission action.

Verizon Wireless offers a brief defense of handset exclusivity and AT&T a longer one.[39] However, both rest essentially on the same basic argument, namely that handset exclusivity arrangements promote innovation and consumer choice, and that there is now a multiplicity of devices available to all carriers, as befits a competitive marketplace, i.e. that exclusive arrangements confer no special advantage. We would note that the second argument, in a sense, refutes itself, that is, if exclusive arrangements had no special value, then the Big Four carriers would hardly invest their resources to obtain them. And whatever the merits of the first argument that exclusive arrangements sometimes promote innovation, an argument that USCC takes issue with, the main problem is that exclusive arrangements cannot be considered in isolation from all the other factors which have created a wireless oligopoly that is rapidly headed toward duopoly. If the wireless industry were still characterized by reasonable equality among competitors, then exclusive contacts might not be the effective means of reinforcing otherwise existing market power that they have become. But, the market is not characterized by equality, and that is the context in which the FCC must evaluate this issue.

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[37] Ibid., p. 7.

[38] Ibid., p. 8.

[39] *See*, e.g., Verizon Wireless Competition Comments, pp. 121-125; AT&T Competition Comments, pp. 41-61.

E. The FCC Should Act Against Tower Siting Delays

In our Comments (pp. 17-19), USCC discussed the ever growing list of regulatory obstacles to the construction of wireless towers and their deleterious impact on wireless network construction and competition. We urged the FCC to focus on tower-related issues, as being within its jurisdiction, as opposed to some of the other subjects discussed in the *Innovation* and *Competition NOIs,* which are outside the FCC's control.

All wireless carriers considering this issue share USCC's concerns. Commenters have addressed adoption of some form of the "shot clock" proposed by CTIA[40] and the expedition of FCC environmental and historic preservation reviews of proposed tower sites.[41] This degree of unanimity among carriers often at odds on other issues is rare and is an indication of the seriousness of the problem and of the importance of the FCC taking action to assist its licensees in carrying out the FCC's mandates by promoting tower construction.

F. The Adoption of Appropriate Universal Service Policies Remain Crucial To The Achievement of Competition Equality

USCC's Comments (pp. 19-24) also called attention to the need for appropriate policies to promote the statutorily mandated objectives of universal telephone service and local competition between and among wireless and wireline carriers. USCC stated that the FCC had originally adopted policies which accomplished those dual objectives of the 1996 Telecommunications Act and had acted in accordance with the core principle of competitive and technological neutrality.[42]

However, in recent years, in part owing to misplaced concerns over the growth of the "high cost fund," the FCC has adopted ill-advised policies, which have had adverse affects on the

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[40] *See*, e.g., Comments of Clearwire Corporation in GN Docket Nos. 09-157, 09-51, filed September 30, 2009, ("Clearwire Innovation Comments"), pp. 15-16; Comments of CTIA in WT Docket No 09-66, filed September 30, 2009, ("CTIA Competition Comments"), pp. 84-85; Comments of PCIA in GN Dockets Nos. 09-157, 09-51, filed September 30, 2009, pp. 5-18; AT&T Innovation Comments, p. 94; T-Mobile Comments, pp. 28-30; MetroPCS Innovation Comments, pp. 22-24.

[41] Verizon Wireless Innovation Comments, pp. 184-190.

[42] USCC Comments, pp. 19-20.

delivery of services (and thus also on competition) in rural and high cost areas. We cited, as an example of such policies, the imposition of a "cap" on "high cost" disbursements received by wireless (and only wireless) Eligible Telecommunications Carriers ("ETCs"). We also referred to former FCC Chairman Kevin Martin's reverse auction proposal. [43] In contrast, USCC stressed that the best means of fulfilling the goals of universal service and competition would be for the FCC to implement policies which emphasize disaggregation and portability of high cost support, which would have the effect of providing support where such support was most needed and of limiting the growth of the high cost fund, while also shifting support to those carriers which are actually winning customers in rural areas.[44]

Regrettably, universal service was not a significant focus of comments by most filers in response to either the *Innovation* or *Competition NOIs*. However, we wish to acknowledge Sprint's provocative comments in support of reform of universal service high cost support (and intercarrier compensation).[45] As Sprint notes, the current high cost support system is not designed to support the deployment of modern broadband networks but rather circuit switched networks thereby disincenting carriers from making the investment necessary to migrate to more modern IP based networks. Moreover, current subsidy arrangements result in wireless consumers pay into the Universal Service Fund all out of a proportion to the amount of the fund that is used to support the deployment of wireless networks. .[46] We agree with Sprint that universal service reform should be a vital component of FCC broadband and competition policy.

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[43] USCC Comments, p. 21.

[44] Ibid, p. 22.

[45] Comments of Sprint Nextel Corporation in WT Docket No. 09-66 ("Sprint Competition Comments"), pp. 19-20.

[46] Sprint Competition Comments, p. 19.

II. The Public Private Partnership Model Should be Adopted to Meet Network Sharing Needs of Commercial Subscribers and Public Safety Entities

In response to the Commission's request to identify new business models and solutions being developed to serve commercial subscribers and public safety entities that traditionally have been served by separate networks,[47] USCC recommends the public-private partnership shared network model for 700 MHz as a way to promote the twin goals of meeting public safety needs and expanding commercial broadband services. As we noted in our comments and in testimony before the House Commerce and Energy Committee, Subcommittee on Communications, Technology and the Internet House Subcommittee, there are two potential paths to this shared network, one based on legislation, which we could support with appropriate modifications, and another based on FCC action under the current statutory framework.[48]

We welcome Verizon Wireless' comments in support of a "public private partnership approach" and deployment of "shared regional networks." [49] But we disagree that its proposed "four key, interdependent principles" are adequate to achieve the Commission's goals.[50] Any approach for proceeding with the licensing of the D Block, whether based on legislation or FCC initiative, should include the following points: (1) public safety and commercial customer shared use of this spectrum; (2) commercial operator construction and operation of the shared network; (3) assurances of long-term partnership that allows commercial operators to build the network's commercial capacity into their business plans; (4) opportunities for smaller and rural carriers through regional public/private partnerships; (5) fair, open, effective and speedy processes for selection of commercial operators; (6) standards for commercial uses of portions of this spectrum; and (7) reasonable geographic sizes for the public/private partnerships.

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[47] See *Innovation NOI*, Paras. 61-62.

[48] USCC Comments, p. 8; Written Testimony of Joseph R. Hanley, Vice President, Technology Planning and Services, Telephone and Data Systems, Inc., Before the House Committee on Energy and Commerce, Subcommittee on Communications, Technology and the Internet. September 24, 2009, p. 1.

[49] Verizon Wireless Innovation Comments, at pp. 193-194.

[50] Ibid.

We encourage the Commission to act under its existing authority, rather than waiting for congressional initiative. The Commission should build on pending proposals in its D Block/ PSBL spectrum rulemaking proceedings in WT Docket Nos. 06-150 and 06-229. The Commission can diminish the uncertainty and risk to which Verizon Wireless refers and proceed with an auction approach by amending its current rules: (1) to take account of the recent efforts of the public safety organizations that endorsed fourth-generation LTE technology and developed a set of requirements for this network; (2) to stimulate industry standards groups of carriers and equipment manufacturers to move forward with specifications for LTE which address many issues in creating this national interoperable broadband network; (3) to recognize the benefits of regional licenses (not nationwide or mega-regions) to create an interoperable broadband network that covers the nation; (4) to remove technical uncertainties to make the re-auction more attractive for commercial operators as well as future public safety users; and (5) to alter the auction rules so that, for any license that remains unsold to commercial bidders, the PSBL could acquire that license with no monetary payment to the U.S. Treasury and then proceed with a competitive selection of commercial operators for the public/private partnership in those regions.

As described here shared use of these spectrum blocks under the public private partnership model can be implemented either legislatively or through rulemaking. Either way a shared network approach will benefit public safety agencies through economies in building and funding its broadband network while ensuring that capacity, coverage and quality are available to public safety, especially in emergencies. And consumers nationwide will also benefit because shared use will expand availability of competitive broadband services to help meet the Commission's goal of ensuring competition and consumer choice.

III. The Commission Has Ample Justification to Adopt Technical Standards Confirming the LTE Technology Choice by the Public Safety Community

In response to the Commission's questions about the role of technical standards,[51] we support Commission action to permit public safety stakeholders to select Long Term Evolution ("LTE") as the interoperable technology of their choice for the shared national broadband network.

We agree with the comments of Motorola and Verizon Wireless that the choice of LTE of the public safety community reflects the compelling need for a common technology choice supporting nationwide interoperability. Motorola supports Commission policies to ensure technological neutrality for broadband deployment but carves out an appropriate exception " ... except where public safety interoperability is involved."[52] Verizon Wireless similarly supports the Commission's "long held policy ... of not imposing specific technologies or uses on exclusively licensed spectrum" [53] but recommends that the Commission "... adopt a national technical framework which will ensure nationwide interoperability [for the proposed national public safety broadband network]."[54]

Similarly Stacey Black, Assistant Vice President - Market Development, Mobility Product Management, AT&T recently testified before the House Commerce and Energy Committee, Subcommittee on Communications, Technology and the Internet requesting that " Congress or the FCC should mandate the use of the 3GPP LTE air interface standard to ensure

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[51] See *Innovation NOI*, Paras. 50 and 60.

[52] See Comments of Motorola, Inc., in GN Dockets 09-157, 09-51 filed September 24, 2009, ("Motorola Innovation Comments"), p. 2.

[53] See Verizon Wireless Innovation Comments, p. 131.

[54] Ibid. at p. 194.

interoperability nationwide and the ability to share in economies of scope and scale with commercial providers in the 700 MHz band."[55]

As we explained in our comments, the Commission should adopt an LTE standard or permit the Public Safety Broadband Licensee ("PSBL") to select an LTE standard so that the public safety community can ensure establishment of nationwide interoperable broadband capability, to provide for spectrally efficient shared network uses which also meet broadband needs of the general public, to provide for significant cost savings and revenue resources which benefit the operations of all first responders, and to provide for on-going development and upgrading of the network capabilities used to meet the critical mobility needs of first responders.

IV. USCC Agrees With Other Carriers Regarding The Need To Provide More Spectrum For Wireless Users and To Protect That Spectrum

As noted above, USCC has disagreed with the largest wireless carriers on various aspects of wireless policy. But we are in agreement with those carriers regarding the need to provide more spectrum for wireless users, to maintain exclusive licensing for that spectrum, and to protect wireless spectrum from increased interference, including from existing wireless "repeaters" and possible "overlay" and "underlay" spectrum allocations.

Concerning the need for more spectrum to be allocated to wireless uses, CTIA has demonstrated how demand for mobile data services have grown exponentially in recent years, necessitating the allocation of additional spectrum to wireless uses.[56] CTIA, AT&T and T-Mobile have pointed to the possible means by which the FCC may, over time, determine which spectrum can be re-allocated, largely from existing government uses.[57] And as noted in Section I

[55] See Written Statement of Stacey Black, Assistant Vice President - Market Development, Mobility Product Management, AT&T before the House Commerce and Energy Committee, Subcommittee on Communications, Technology and the Internet, dated September 24, 2009, p. 2.

[56] Comments of CTIA in GN Docket Nos. 09-157, 09-51, filed September 30, 2009 ("CTIA Innovation Comments"), pp. 69-72.

[57] CTIA Innovation Comments, pp. 72-75; AT&T Competition Comments, pp. 76-83; T-Mobile Comments, pp. 17-23.

above, USCC agrees with Sprint that the FCC should act soon to put the AWS-2 H and J Blocks, the Upper 700 MHz D Block, and AWS-3 Block into productive use.[58]

Once spectrum is allocated, it is vital that carriers be able to use their full capacity efficiently. And it will be crucial to such productive use that the FCC maintain its present policy of exclusive licensing for new or existing wireless spectrum, and that it begin to enforce its existing rules against repeater and other interference.

USCC agrees with CTIA that an "exclusive use, flexible rights" licensing regime is best suited to promote innovation and technological development[59] and with Verizon Wireless that exclusive use will become even more important to network development in the 4G, broadband era.[60] Disparities in spectrum allocations have emerged as a result of auctions with large license areas and package bidding coupled with limited opportunities for secondary market acquisition of spectrum held in the clutches of dominant carriers. As a result, small and mid-sized carriers will need every bit of spectrum they are licensed to operate on. There is a consensus among wireless carriers that "underlay" and/or "overlay" licensing of wireless spectrum would be disastrously counterproductive, as there is consensus on the continuing harm of wireless "repeaters."[61] We ask once again that the FCC enforce its existing rules against such repeaters and that it not deliberately raise the interference "noise floor" by licensing other radio uses on wireless spectrum.

The FCC has placed and will place many responsibilities on the shoulders of wireless carriers in the coming period. The wireless industry can meet those responsibilities provided it has adequate spectrum and the unfettered use of it. The FCC should take the actions described above to protect wireless spectrum.

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[58] Sprint Innovation Comments, pp. 3-5.

[59] CTIA Innovation Comments, pp. 75-80.

[60] Verizon Wireless Innovation Comments, p. 118-121.

[61] *See, e.g.* Verizon Wireless Innovation Comments, pp. 132-138; AT&T Innovation Comments, pp. 75-90; CTIA Innovation Comments, pp. 80-82.

Conclusion

The comments in these proceedings make clear that we are on the verge of a new era, one distinguished by massive increases in data transmission and a shift to an IP platform through use of 4G systems. Contrary to the arguments of the largest carriers, this evolution makes it more and not less necessary that the FCC act to safeguard wireless competition and wireless customers by supporting small and mid-sized carriers' ability to provide high quality service and competitive choice to their often disproportionately rural customers. Also, as described above, the FCC should adopt a public-private partnership with respect to 700 MHz D Block spectrum and reaffirm the exclusive rights model for all spectrum assigned to wireless carriers.

Respectfully submitted,

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