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

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| In re Applications of | ) | |
| AT&T MOBILITY SPECTRUM LLC and QUALCOMM INCORPORATED | ) | WT Docket No. 11-18<br>DA 11-252<br>ULS File No. 0004566825 |
| For Consent to the Assignment Of Lower 700 MHz Band Licenses | ) | |

**PETITION TO DENY OF FREE PRESS, PUBLIC KNOWLEDGE, MEDIA ACCESS PROJECT, CONSUMERS UNION, AND THE OPEN TECHNOLOGY INITIATIVE OF THE NEW AMERICA FOUNDATION**

Mar. 11, 2011

## SUMMARY

Radio spectrum is a public resource. Exclusive private use of public spectrum is carefully licensed and regulated by the Federal Communications Commission to ensure that such use is in the public interest. In this proceeding, Qualcomm and AT&T seek approval of their proposed transfer of Qualcomm's exclusive spectrum license, so that AT&T may use the spectrum in its future LTE network.

The burden of proof in this proceeding lies with the applicants, who have failed to show that the proposed transfer serves the public interest. Applicants fail to acknowledge the significant potential harm of further empowering a dominant, vertically integrated provider through the acquisition of additional beachfront spectrum. Applicants instead rely on assertions that the transfer will not immediately increase market concentration nor trigger the current, disputed spectrum screen. These analyses fail to take into account numerous long-term risks associated with approving this application.

The transfer as proposed does not serve the public interest. The risks posed by the transaction are too great, and its potential benefits are too few, too speculative, and will take too long to take effect. The Commission should deny this transaction, and instead move to make the spectrum available for use by unlicensed devices. This choice offers the most efficient, most valuable, and most beneficial use of the spectrum for a diverse range of uses and users.

If the Commission instead chooses to grant approval for this transaction, it must offset the competitive harms and risks that the transaction poses. The Commission must condition approval on safeguards that prevent AT&T from restricting competition and innovation by leveraging its spectrum resources and network infrastructure to harm vertical providers, horizontal competitors, and end users.

This Commission has made spectrum and mobile broadband central aspects of its policy agenda and its long-term goals as set out in the National Broadband Plan. But if the Commission attempts to reach these goals by simply allowing AT&T to grow bigger, the agency may well end up doing more harm than good for the public interest.

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Petitioners, all public interest and consumer advocacy organizations without commercial interests in this proceeding, respectfully submit this Petition to Deny the above-captioned application. Petitioner organizations have a substantial history of advocacy for greater effective competition and consumer protections in the wireless industry. Greater competition lowers prices for consumers, improves consumer choice, encourages innovation, and enables greater citizen use of and participation in the democratic processes enabled by media and the Internet.

## Introduction

Radio spectrum is a public resource. Congress directs the Federal Communications Commission to manage spectrum to serve "the public interest, convenience, and necessity,"[1] including licensing spectrum for private use when and where that use benefits the public. Spectrum licenses are limited by statute to fixed periods of time and expressly do not confer

[1] *See, e.g.*, 47 U.S.C. § 309(a) ("Subject to the provisions of this section, the Commission shall determine, in the case of each application filed with it to which section 308 of this title applies, whether the public interest, convenience, and necessity will be served by the granting of such

ownership of spectrum.[2] As such, when a private party seeks to transfer spectrum licenses to another private party, the Communications Act requires the Commission to evaluate whether that use of the spectrum continues to serve the public benefit.

In this proceeding, Qualcomm and AT&T seek approval of their agreement to transfer spectrum licenses held by Qualcomm to AT&T, one of the two dominant wireless carriers in the United States.[3] Qualcomm purchased these spectrum licenses to offer a mobile video service known as MediaFLO, which Qualcomm has subsequently decided to terminate. AT&T seeks to use the spectrum licenses as part of its future wireless two-way communications services. AT&T and its closest competitor, Verizon Wireless, each have approximately as many subscribers as all of their other rivals combined.

In license transfer proceedings, the burden of proof to demonstrate that a transaction serves the public interest lies with the applicants.[4] Applicants here fail to meet that burden in the application. The application ignores facts that clearly demonstrate that this transaction will limit competition and harm consumers. It fails to acknowledge systemic problems with the mobile broadband market that prevent effective competition; AT&T's dominant influence on that market; and AT&T's ability and incentive to leverage its market position, infrastructure, and business relationships to harm its competitors and end users. Reviewing the application in this context, the Commission must deny the application: The risks posed by the transaction are too

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application.").

[2] 47 U.S.C. § 301 ("It is the purpose of this chapter... to provide for the use of such channels, but not the ownership thereof, by persons for limited periods of time, under licenses granted by Federal authority, and no such license shall be construed to create any right, beyond the terms, conditions, and periods of the license.").

[3] Throughout this petition, we refer to AT&T and Qualcomm together as Applicants.

[4] *E.g. In the Matter of Applications of AT&T Wireless Services, Inc. and Cingular Wireless Corporation for Consent to Transfer Control of Licenses and Authorizations*, Memorandum Opinion and Order, 19 FCC Rcd 21522, para. 40 (2004) ("The Applicants bear the burden of proving, by a preponderance of the evidence, that the proposed transaction, on balance, serves

great, and its potential benefits are too few, too speculative, and will take too long to take effect.

Applicants rely heavily on the claim that AT&T's holdings will not exceed the spectrum screen to demonstrate that the transfer would serve the public interest. However, that claim falls short of meeting Applicants' burden of proof, because a spectrum screen analysis does not take into account all of the potential risks that arise from permitting a dominant, vertically integrated provider to grow larger. Furthermore, the Commission's current spectrum screen fails to capture the relationship between spectrum holdings and market power because it weighs all spectrum equally. Licenses to use "beachfront" spectrum below 1 GHz confer significant advantages relative to other holdings because broadband networks using that spectrum can be built more cheaply than those that rely on spectrum above 1 GHz. Qualcomm's spectrum licenses lie in the Lower 700 MHz band, in the heart of the beachfront. Thus, Applicants' compliance with that inadequate spectrum screen in transferring Qualcomm's licenses cannot function as a proxy for a public interest evaluation of the proposed transaction.

Applicants also assert that the transfer serves the public interest because the Qualcomm licenses "cannot and will not be put to full and efficient use as stand alone, one-way 6 MHz licenses."[5] While it is unfortunate that Qualcomm's efforts to develop the spectrum proved unsuccessful, the cure for this does not lie in granting approval for a merger that would result in an anticompetitive outcome. Taking Applicants at their word that the licenses cannot be utilized by Qualcomm, but being required to deny the transfer to AT&T for the reasons stated, the Commission should instead initiate a separate proceeding following conclusion of this proceeding to permit access to this spectrum by unlicensed devices.

This choice offers the most efficient, most valuable, and most beneficial use of this

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the public interest.").

[5] Exhibit 1, Description of Transaction, Public Interest Showing and Related Demonstrations, at

spectrum for a diverse range of uses and users. It would provide a small but reliable portion of spectrum to complement the variable amounts of spectrum recently made available for unlicensed devices in the Commission's TV White Spaces proceedings.[6] It would help stimulate growth of a robust market for devices and equipment that use unlicensed spectrum, which in turn could help open additional opportunities to offload traffic from mobile broadband networks and alleviate congestion woes. To best serve the public interest, the Commission should deny this application, and then initiate appropriate steps to make the spectrum available for use by unlicensed devices.

If the Commission instead chooses to grant approval for this transaction, it must offset the competitive harms and risks that the transaction poses. The Commission must prevent AT&T from restricting competition and innovation by leveraging its spectrum resources and network infrastructure to harm vertical providers and end users. To protect consumer choice, the Commission should condition approval of the transfer on AT&T compliance with the fixed broadband rules adopted in the recent Open Internet Order[7] and with the rules protecting consumer choice of applications and devices that bind Verizon Wireless in the use of spectrum licenses for the Upper 700 MHz C block.[8]

Additionally, the Commission should condition approval of the transfer on appropriate protections for competing mobile broadband providers. Specifically, the Commission should impose conditions requiring AT&T to offer data roaming to all competitors on reasonable terms

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6 ("Exhibit 1").

[6] *See, e.g., Unlicensed Operation in the TV Broadcast Bands, Additional Spectrum for Unlicensed Devices Below 900 MHz and in the 3 GHz Band*, Second Memorandum Opinion and Order, ET Docket Nos. 04-186, 02-380, FCC 10-174 (2010) (finalizing rules adopted in 2008 to permit unused spectrum in TV bands to be used by unlicensed devices).

[7] *Preserving the Open Internet, Broadband Industry Practices*, GN Docket No. 09-191, WC Docket No. 07-52, FCC 10-201 (2010).

[8] 47 C.F.R. § 27.16.

and conditions; to provide for interoperability in band classes in 700 MHz spectrum so as not to hinder the ability of competitors to deploy advanced devices; to refrain from entering into exclusive deals for devices; to refrain from trapping subscribers with punitive early termination fees not directly traceable to device costs; to offer special access and other backhaul services to competitors on reasonable terms and conditions; and to phase out its receipt of funds from the Universal Service Fund's High Cost program for its wireless services.

This Commission has made spectrum and mobile broadband central aspects of its policy agenda and its long-term goals as set out in the National Broadband Plan.[9] President Obama has also argued that in the short term, we must increase available spectrum for mobile broadband.[10] But if the Commission advances these goals by allowing an already dominant carrier to grow bigger by gaining additional, valuable spectrum, without safeguards to protect competitors or end users, then the agency may well end up doing more harm than good for the public interest.

## I. Granting This Application Would Not Serve the Public Interest.

The application fails to meet its burden of proof to show that the transaction would serve the public interest. It relies on incomplete measurements of impact, including HHI analysis. It suggests that the mere existence of other wireless companies demonstrates effective competition. It relies heavily on a faulty spectrum screen. And it fails to acknowledge AT&T's ability to leverage its market power over backhaul, services, devices, and customers to harm its competitors. Applicants cannot meet the burden of proof because this transaction further

[9] The policy proposals in the National Broadband Plan include many issues of particular importance to the wireless industry, including increasing available spectrum for mobile broadband use, reviewing special access rules, updating policies related to wireless backhaul, and adopting data roaming obligations. Federal Communications Commission, *Connecting America: the National Broadband Plan* XII (2010) ("*National Broadband Plan*").

[10] *See, e.g.*, Jared A. Favole, *Obama to Nearly Double Spectrum for Wireless Devices*, WALL STREET JOURNAL (June 28, 2010), *available at*

empowers an already dominant AT&T by increasing its beachfront spectrum license holdings, generates a windfall for both companies without public benefits, and does not represent the most valuable or efficient use of the spectrum. Accordingly, the transfer does not serve the public interest.

Applicants correctly note that the transaction does not change market concentration (as measured by HHI) nor limit other carriers' abilities to provide services with current holdings.[11] However, this assertion fundamentally misses the point. Under the same analysis, the Commission's 2008 auction of 700 MHz spectrum had no immediate impact on market concentration, as it did not change HHI levels or limit the ability of carriers who did not purchase spectrum to provide services with their current holdings. However, the long-term impact of the auction on market concentration cannot be denied because its outcome was the acquisition of spectrum licenses that have been, and continue to be, used for new mobile services with significant market impact. Given AT&T's dominant market position, its significant spectrum holdings, and the value of this particular spectrum, this transaction, too, has the power to dramatically alter the market for mobile broadband services. HHI serves as a valuable *static* measurement for the level of competition in a market, and change in HHI is relevant in the short term and the long term to evaluate the impact of mergers of two horizontal competitors (where both are using spectrum for the same purpose). But to evaluate a transaction that will put new spectrum into use for mobile broadband, an analysis of the change in HHI does not take into account future changes in market concentration as the spectrum is put into use.

The ability to compete effectively in the mobile broadband market depends on far more than current spectrum holdings or market share. The mere existence of competitors who have

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http://online.wsj.com/article/SB10001424052748703964104575334783706873078.html.

[11] *See* Exhibit 1 at ii, 19-20.

networks and services does not address AT&T's ability to leverage its market position in ways that harm competition.[12] AT&T holds advantages that go beyond spectrum holdings and market share, including control over backhaul facilities used by its competitors, influence over the design of band classes for devices, exclusive agreements for some popular handsets, and lengthy subscriber contracts backed by punitive early termination fees that greatly discourage churn. These advantages, and AT&T's increased ability to exercise them through additional beachfront spectrum, should be taken into account as part of the Commission's review of this application.[13] By ignoring these factors entirely, the applicants have not met their burden of proof in demonstrating that the transaction furthers the public interest.

In fact, Applicants cannot meet that burden of proof, because AT&T already possesses substantial power to engage in harmful and anticompetitive behavior. Permitting this transaction would allow the rich to grow richer by letting AT&T gain even more beachfront spectrum, which the company can then leverage into more control and anticompetitive harm. Further improving AT&T's already dominant market position does not serve the public interest, particularly when the spectrum can be put to more beneficial use.

Additionally, this transaction would give both companies a private economic windfall without any public benefit. Qualcomm paid an average of 27 cents per MHz-pop for the

[12] The application argues that the mobile broadband market is competitive by identifying its alleged competitors and describing their services. *Id*. at 32-34.

[13] These factors have been detailed by public interest organizations and competing carriers in the Commission's recent proceedings concerning effective competition in the wireless industry. *See, e.g.*, Comments of Free Press and Media Access Project, *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 Wireless Services*, WT Docket No. 10-133 (filed July 30, 2010), at 17-22 (discussing the impact on effective competition of loopholes in Commission's rules regarding data roaming, control over special access services by AT&T and Verizon Wireless, and market power over downstream segments including devices and applications held disproportionately by the largest service providers).

spectrum, and AT&T will buy those licenses at 87 cents per MHz-pop.[14] Qualcomm effectively receives a bonus for developing its failed MediaFLO service.[15] AT&T, meanwhile, receives a healthy discount: In the 2008 auction, spectrum licenses in the 700 MHz band cost $1.28 per MHz-pop,[16] significantly more than 87 cents. Repurposing Qualcomm's spectrum for mobile broadband use creates economic gain - which the parties in this transaction have divided among themselves, leaving none for the public.

Nor will anyone actually *use* the spectrum until 2014 - multiple years away.[17] Even that date is an estimate. It depends on successful development and agreement on a new wireless network standard by 3GPP,[18] a process that could involve unpredictable delays. It also depends on the successful design and manufacturing of "chipsets, devices, base station and other network equipment utilizing the standards" and testing and certification of equipment and end user devices by AT&T.[19] Each of these additional steps could introduce further delay. A delay of three or more years before deployment runs contrary to the Commission's goal of putting spectrum to its most efficient use.[20]

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[14] *E.g.*, Tiernan Ray, *AT&T: Will Spectrum Purchase Slow Buybacks?*, Barron's (Dec. 20, 2010), *available at* http://blogs.barrons.com/techtraderdaily/2010/12/20/att-will-specturm-purchase-slow-buybacks/.

[15] Petitioners do not intend to imply any intention of warehousing or rent-seeking on Qualcomm's part. However, as Qualcomm has chosen to discontinue its MediaFLO service and transition the use of the spectrum, the Commission has a legal responsibility to manage that transition and ensure that the spectrum is used in the most productive manner, and for purposes that most serve the public interest and the interest of competition.

[16] *E.g.* 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, *Fourteenth Report*, FCC 10-81, at para. 271 (rel. May 20, 2010) ("*Fourteenth Report*").

[17] *See* Declaration of Kristin S. Rinne, Senior Vice President – Architecture & Planning, AT&T Services, Inc., at 3.

[18] *Id.*

[19] *Id.*

[20] *See, e.g.*, Exhibit 1 at 4-5 (citing the Commission's National Broadband Plan).

AT&T does not need this spectrum to "remain competitive."[21] AT&T already enjoys substantial reserves of beachfront spectrum.[22] If AT&T requires yet more spectrum to deploy competitive services, then several of the alleged competitors listed in the application - including T-Mobile, MetroPCS, Cricket, U.S. Cellular, nTelos, Allied Wireless Communications Corporation, Cellular South, and Cox[23] - might as well close up shop, as they have far less spectrum than AT&T's current holdings. In that view, only Verizon Wireless and Clearwire compete meaningfully with AT&T. Applicants cannot simultaneously argue that AT&T faces substantial competition across the industry, including from much smaller carriers with far smaller holdings, *and* that the company requires Qualcomm's licenses to remain competitive.

Finally, the transaction confers no benefit to any other wireless carrier, all of whom face the same growth in demand for services as AT&T.[24] AT&T's alleged capacity constraints are shared by all carriers, many of whom have no untapped reserves of spectrum.

## II. The FCC's Spectrum Screen Does Not Capture AT&T's Significant and Disproportionately Valuable Spectrum Holdings.

The application contains a detailed, market-by-market review of the impact the transfer would have on AT&T's spectrum holdings as compared to the relevant spectrum screens currently in place. The application acknowledges some flexibility in interpretation of the screen but states that under one reading, AT&T would not exceed the screen anywhere.[25] Under another, the violations would be extremely minimal.[26] We trust the Commission to evaluate the

[21] *See* Exhibit 1 at 12.
[22] *See* Exhibit 1 at 13 ("AT&T plans to begin LTE deployment in the middle of this year over its 700 MHz and AWS spectrum.").
[23] *Id.* at 33-38.
[24] *Id*. at 12-13.
[25] *Id.* at 20.
[26] *Id.* at 21 (noting that if the screen is extended to include all of AT&T's attributable WCS spectrum, the transaction would result in AT&T's holdings exceeding the screen in two counties

veracity of these claims independently and to incorporate any additional spectrum AT&T has recently acquired or has applied to acquire.[27]

Applicants' analysis woefully under-estimates the problems that can arise from consolidated spectrum ownership because the Commission's spectrum screen does not measure spectrum concentration effectively. Many parties have challenged the recent expansion of the screen and petitions to revise the screen remain pending before the Commission.[28] The Commission should not allow Applicants to rely solely on compliance with a spectrum screen of unsettled legal status.[29]

To properly measure spectrum holdings, the Commission must account for the physical differences in spectrum and the impact of those differences on spectrum value, utility, and business impact. Not all spectrum can be used equally effectively for all purposes. In particular, broadband providers can construct networks most quickly and efficiently when they use

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in Kentucky and one in Nevada).

[27] Already in 2011, AT&T has sought Commission approval of two separate, smaller acquisitions, both for spectrum in the 700 MHz band, one from Whidbey and one from Windstream. *See* Phil Goldstein, *AT&T hunts for more 700 MHz spectrum to boost 2G, 3G capacity*, FierceWireless (Feb. 17, 2011), *available at* http://www.fiercewireless.com/story/att-hunts-more-700-mhz-spectrum-boost-2g-3g-capacity/2011-02-17.

[28] Public interest groups filed a petition for reconsideration of the order's spectrum screen extension, *see* Petition for Reconsideration of the Public Interest Spectrum Coalition, *Sprint Nextel Corporation and Clearwire Corporation Application for Consent to Transfer Control of Licenses and Authorizations*, WT Docket No. 08-94 (filed Dec. 8, 2008). Separately, the Rural Telecommunications Group filed a petition requesting the FCC reinstate a modified version of its spectrum cap, *see Rural Telecommunications Group, Inc. Petition for Rulemaking to Impose a Spectrum Aggregation Limit on All Commercial Terrestrial Wireless Spectrum Below 2.3 GHz*, Petition for Rulemaking, RM-11498 (filed July 16, 2008). Neither of these petitions has yet been resolved by the Commission, and consequently, applicants cannot simply rely on compliance with the screen as a proxy for a meaningful analysis of potential competitive harm.

[29] Efforts by the applicants to extend the spectrum screen even further should be dismissed. *See* Exhibit 1 at 21-25. Much of the spectrum mentioned has not yet been approved by the Commission for primary mobile broadband use. Even if it were approved, however, all of the additional spectrum referenced in the application is well above 1 GHz, does not provide equivalent value as beachfront spectrum, and should not be weighed as equal to beachfront spectrum in the Commission's review of the competitive impact of a spectrum transfer.

spectrum below 1.0 GHz, as data communications on sub-1 GHz spectrum can travel over great distances and through multiple walls without loss. Spectrum between 1 GHz and 2 GHz can also sustain mobile broadband use, but network operators must construct more towers because a strong signal attenuates more quickly.[30] Higher spectrum holdings, including those above 2 GHz, *can* be used for mobile broadband networks, but the cost of building and maintaining coverage over large geographic areas goes up as the frequency increases. As the Commission has recognized, coverage that requires a single cell site at 700 MHz would require *nine cells* at 2.4 GHz.[31] In particular, the Commission acknowledges that spectrum in the 700 MHz band is ideal for mobile broadband use because of its "excellent propagation."[32]

Because of this spectrum's unique value, the Commission must not approve the present application without specifically and distinctly examining holdings in the 700 MHz band and holdings below the 1 GHz threshold. The Commission should weigh heavily any imbalance in holdings below 1 GHz and should act carefully before taking any actions that would further exacerbate this imbalance.[33]

Analysis of spectrum holdings below 1 GHz reveals a significant imbalance in ownership. Currently, two companies, AT&T and Verizon Wireless, hold a disproportionate percentage of spectrum below 1 GHz allocated for mobile broadband use. These companies together have 68% of pop-weighted average spectrum below 1 GHz.[34] Granting this application

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[30] *Fourteenth Report* at para. 270.
[31] *Id.*
[32] *Id.* at para. 269.
[33] The applicants deny the need for a separate screen applicable to spectrum under 1 GHz, by noting the existence of competitors offering mobile broadband networks in higher ranges. *See* Exhibit 1 at 28-29. These arguments fail to acknowledge the substantially higher costs associated with such networks, as the Commission has noted. Beachfront spectrum is not equivalent to spectrum above 2 GHz, and the Commission should not weigh them identically for purposes of competitive evaluation.
[34] *See Fourteenth Report* at chart 41, p. 154.

would further increase the imbalance. If Qualcomm's licenses were added to AT&T's current holdings, AT&T would hold more spectrum licenses below 1 GHz than every company other than AT&T and Verizon Wireless - combined.[35] The sub-1 GHz market would be a near-duopoly.[36]

## III. Rather Than Approve a Harmful License Transfer, the Commission Should Make the Qualcomm Spectrum Available as a Nationwide Baseline for Unlicensed Devices.

Applicants argue that because Qualcomm's efforts to develop its licenses proved unsuccessful, that the Commission should approve the transfer. Applicants maintain that Qualcomm cannot otherwise develop the licenses, and that "spectrum should be put to its most valuable and efficient use," particularly given growing demand for mobile broadband services.[37] Applicants contend that the size and unpaired nature of the Qualcomm licenses limit its utility for other potential licensees, and allege risk that the spectrum "will remain under-utilized" unless it can be paired with other spectrum, such as through AT&T's nationwide footprint and its planned supplemental downlink technology.[38]

However, this contention is incorrect. In fact, granting this application would not put the Qualcomm spectrum to its most efficient or valuable use, because more efficiency and value would be gained if it were used by unlicensed devices. The Commission's choice is therefore not between leaving spectrum underutilized or approving the proposed license transfer, as

[35] AT&T currently has 38 MHz of 134 MHz total in population-weighted average, and other carriers in total have 43 MHz. *Id.* This transaction involves 6 MHz absolute spectrum nationwide (and 12 MHz in some markets), which would push AT&T to more than 44 MHz of population-weighted average spectrum, and other carriers to under 37.

[36] Many would argue that the mobile broadband market already functions as a near-duopoly. Metrics such as churn and growth indicate disproportionate advantages for AT&T and Verizon Wireless, driven by many policy and market aspects such as control over backhaul and exclusive access to the most popular devices including the iPhone and iPad. Additional policy reforms and safeguards are needed to balance the duopoly-like nature of this market.

[37] Exhibit 1 at 4 (citing the Commission's National Broadband Plan).

Applicants argue, but instead between permitting an anticompetitive transfer and denying the Application, and subsequently modifying Qualcomm's license to permit unlicensed access.

Indeed, even without the anticompetitive harms posed by the transfer, Petitioners note that unlicensed use of the spectrum would be more efficient than trying to repurpose the licenses as AT&T and Qualcomm suggest. Unlicensed use does not require new broad-purpose 3GPP standards or new network infrastructure. Consumers and innovators might see practical benefits far sooner than 2014 - perhaps even in 2011.

Reserving the spectrum for unlicensed use would also create more value by using unlicensed devices to reduce congestion in mobile broadband networks and by facilitating the growth of a valuable market for unlicensed devices. Many carriers, including AT&T, have responded to growing use and congestion by offloading traffic to fixed network access points rather than more distant cell sites.[39] Carriers often use unlicensed spectrum allocated for Wi-Fi services to offload traffic from their networks. An additional nationwide footprint for unlicensed use - in beachfront spectrum - could offer comparable benefits by extending wired connections over greater distances and by allowing devices to connect to each other without the intermediation of a centralized cell site.[40] It would supplement the ad-hoc and variable spectrum made available by the TV White Spaces proceedings and would enable constant connectivity for devices that rely on unlicensed spectrum. Dedicated unlicensed beachfront spectrum would foster a healthy market for these devices, a market that can be expected to grow rapidly in the short term.

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[38] *See* Exhibit 1 at 7.

[39] *See, e.g.*, Karl Bode, *AT&T Expands Free Wi-Fi Hot Zones*, DSL Reports (Dec. 28, 2010), *available at* http://www.dslreports.com/shownews/ATT-Expands-Free-WiFi-Hot-Zones-111994.

[40] The spectrum at issue in this application is less sizeable than the spectrum used by Wi-Fi services, but it is more valuable on a per-MHz basis because of its better propagation characteristics, being located in the beachfront. Consequently, its potential utility for unlicensed

As the applicants note, the use of data on mobile devices is growing rapidly. Allowing AT&T to gain 6 MHz more spectrum won't significantly alleviate that problem, even for AT&T, contrary to Applicants' implicit assertions.[41] However, aggressive stimulus for innovation in unlicensed devices and new models of networks and device usage, including far more distributed and short-range communications and far fewer centralized and distant ones, could help a great deal. Ensuring the nationwide availability of robust amounts of spectrum for unlicensed use will help drive these advancements.

Furthermore, unlicensed use provides significant direct public benefit by enabling a broad and diverse range of uses and users. In addition to its use as an extension of commercial networks, it is also used for communications in nonprofit institutions such as universities and hospitals, as well as government buildings, and it is used in individual homes, to share videos and play games and surf the web from couch or kitchen. The potential benefits for these diverse uses and users of adding a reliable nationwide footprint in the 700 MHz beachfront, even a small one, must not be underestimated.

The potential benefits of greater use of spectrum by unlicensed devices as a general matter have been well established through numerous Commission filings.[42] In fact, recognizing this potential, the National Broadband Plan specifically recommended the creation of a new, contiguous nationwide band of spectrum for unlicensed use.[43] Given its propagation characteristics, spectrum located below 1 GHz would be particularly valuable for unlicensed use.

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devices is significant.

[41] *See, e.g.*, Exhibit 1 at 9-10.

[42] *See, e.g.*, Richard Thanki, *The Economic Value Generated by Current and Future Allocations of Unlicensed Spectrum*, GN Docket No. 09-51 (Sep. 2009); Reply Comments of the Public Interest Spectrum Coalition, *Fostering Innovation and Investment in the Wireless Communications Market, A National Broadband Plan for Our Future*, GN Docket Nos. 09-157, 09-51 (filed Nov. 5, 2009).

[43] *National Broadband Plan*, Recommendation 5.11 at p. 94-95.

The Communications Act bars the Commission from considering "whether the public interest, convenience, and necessity might be served by the transfer, assignment, or disposal of the permit or license to a person other than the proposed transferee or assignee."[44] However, the language of Section 310(d) does not bar the Commission from considering whether denial of the application, followed by a separate proceeding to open the spectrum for unlicensed use either by revoking Qualcomm's license[45] or modifying it to permit the use of unlicensed devices with equal rights,[46] would serve the public interest, convenience, and necessity.[47] Consequently, the potential value, efficiency, and public interest benefit of making the spectrum at issue available for use by unlicensed devices should be taken into account in the present decision of whether the proposed transfer serves the public interest.

The spectrum at issue in this transaction does not nearly suffice, alone, to support a robust unlicensed ecosystem. Additional spectrum availability would still be needed to unlock the full potential social and economic benefits of unlicensed devices. However, even this small portion - particularly in conjunction with TV White Spaces spectrum - could stimulate significant investment and economic growth.

Consequently, the Commission should deny this application for a failure to meet the public interest standard of section 310(d).[48] The Commission should then take steps to clear and

[44] 47 U.S.C. § 310(d).
[45] 47 U.S.C. § 312.
[46] 47 U.S.C. § 316 ("Any station license or construction permit may be modified by the Commission either for a limited time or for the duration of the term thereof, if in the judgment of the Commission such action will promote the public interest, convenience, and necessity....").
[47] Furthermore, even if the language is interpreted more broadly than its text supports, the Commission need not consider alternative uses of this spectrum to deny the application, as the Applicants failed to address AT&T's ability to leverage power over backhaul, services, devices, and customers to harm competitors, an ability that increases with additional spectrum resources.
[48] 47 U.S.C. § 310(d) ("No construction permit or station license, or any rights thereunder, shall be transferred, assigned, or disposed of in any manner... [except] upon finding by the Commission that the public interest, convenience, and necessity will be served thereby.").

allocate the Qualcomm spectrum for unlicensed use, including commencing hearings to the extent required by section 309[49] and initiating a separate proceeding either for license revocation or for license modification to open the spectrum for use by unlicensed devices.

## IV. In Order to Alleviate Competitive Harm Posed by the Transfer, the Commission Should Impose Significant Public Interest Obligations.

Should the Commission choose to permit this transaction, it must require substantial public interest obligations to outweigh the harms posed by AT&T's increasing dominance in the mobile broadband market. The Commission must prevent AT&T from restricting competition and innovation by leveraging its spectrum resources and network infrastructure into harm for vertical providers, end users, and horizontal competitors.

*Protections for Vertical Providers and End Users*

In order to partially offset the harms posed by this transfer to vertical providers and end users, the Commission must ensure open access to all Internet content, applications, and services over AT&T's mobile broadband services, including future LTE services that use AT&T's beachfront spectrum. Robust open Internet protections protect consumer choice and promote innovation and competition in the market for Internet content, applications, and services. They will prohibit AT&T from giving preference to its own or its partners' offerings. Consumers need such conditions for several reasons: (1) the mobile broadband market is increasingly concentrated and increasingly important; (2) many communities of color and low-income consumers rely on mobile broadband to access the Internet; and (3) the Commission's December Open Internet Order failed to grant adequate protections to users of mobile broadband services.

[49] *See* 47 U.S.C. § 309(e) ("If ... the Commission for any reason is unable to make the finding ... it shall formally designate the application for hearing on the ground or reasons then obtaining.").

To protect consumers and vertical providers, the Commission should require AT&T to adhere to the open Internet requirements adopted by the Commission for fixed broadband networks for all of its future LTE services, and the Commission should require such agreement as a condition of approval of the application.[50] The fixed broadband conditions far exceed those adopted for mobile networks by preventing network operators from engaging in unreasonable discrimination of Internet traffic. LTE services can offer higher performance than previous mobile networks, as Verizon has already demonstrated – performance on par with many fixed DSL lines and cable modems.[51] Although mobility remains a unique factor, the Commission's rules permit broad flexibility to use reasonable network management to address such challenges.

Additionally, AT&T must agree to open platform requirements matching those already binding Verizon Wireless in its offering of LTE service in the 700 MHz band.[52] The C-block rules help protect consumers, as well as competition and innovation in adjacent markets, by limiting restrictions on the use of applications and devices of the user's choice. Application of matching rules to AT&T in its LTE networks also creates marketplace parity and protects AT&T's chief horizontal competitor, Verizon Wireless, from anticompetitive harm.

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[50] Similar conditions have been required for many previous spectrum license transfers and other actions involving major, vertically integrated network operators raising the potential for increased anticompetitive behavior towards vertical providers, including in particular the recent merger between Comcast and NBC Universal, where Comcast's agreement to comply with the fixed broadband open Internet conditions was relied upon by the Commission in its approval. *Applications of Comcast Corporation, General Electric Company and NBC Universal, Inc. For Consent to Assign Licenses and Transfer Control of Licensees*, Memorandum Opinion and Order, MB Docket No. 10-56, FCC 11-4, at para. 94 n.213 (rel. Jan. 20, 2011).

[51] Early tests of Verizon Wireless's LTE network produce performance estimates that range from 7 Mbps downstream and 1 Mbps upstream, to 32.8 Mbps downstream and 11.99 Mbps upstream. *See, e.g.*, Matt Buchanan, *Verizon LTE Speed Test: Insanely Fast*, Gizmodo (Dec. 2, 2010), *available at* http://gizmodo.com/#!5704797/verizon-lte-speed-test-insanely-fast.

[52] *See* 47 C.F.R. § 27.16 (setting out rules restricting the ability of licensees of the Upper 700 MHz C block related to the attachment and use of devices and applications on networks using the

*Protections for Direct Competitors*

In a context of increasing market concentration, the Commission cannot permit transactions that further increase the power of a dominant market participant without adequately protecting that participant's competitors. Although many other wireless carriers will still experience harm as a result of this transaction because their spectrum holdings cannot compare in size and value to those of AT&T, the Commission can ameliorate these harms by imposing robust conditions. Specifically, the Commission should impose conditions requiring AT&T to offer data roaming to all competitors on reasonable terms and conditions; to promote interoperability in band classes in 700 MHz spectrum to increase the ability of competitors to deploy advanced devices; to refrain from entering into exclusive deals for devices; to refrain from trapping subscribers with punitive early termination fees not directly traceable to up front subsidies; to offer special access and other backhaul services to competitors on reasonable terms and conditions; and to phase out its receipt of funds from the Universal Service Fund's High Cost program.

The Commission should require AT&T to enter into data roaming agreements on commercially reasonable terms and conditions with any and all interested parties for its current HSPA and HSPA+ mobile broadband services and for its future services built on LTE.[53] Even today, AT&T can leverage its market position and spectrum holdings in ways that disadvantage

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spectrum).

[53] Similar to the proposed requirement, as a condition of the transfer of spectrum licenses involving Sprint and Clearwire, New Clearwire committed to offering "wholesale access to its network 'to other entities that are willing to negotiate commercially reasonable terms and conditions for this access.'" *Sprint Nextel Corporation and Clearwire Corporation, Applications For Consent to Transfer Control of Licenses, Leases, and Authorizations*, Memorandum Opinion and Order, WT Docket No. 08-94, File Nos. 0003462540 *et al*, FCC 08-259, at para. 90 ("*Clearwire Order*"). This commitment was referenced multiple times in the Commission's public interest analysis of the transaction, and appears to have been instrumental in its determination to permit the transfer.

its competitors, as discussed above.[54] Adding further to AT&T's power by permitting this transfer would immediately increase the risk of abuse. Some of AT&T's competitors offer services using HSPA and HSPA+ technology, while others use incompatible CDMA technology but will deploy LTE over time. But all of AT&T's competitors face risk of increased harm if the Commission approves the transfer. Requiring AT&T to offer data roaming for all its networks on commercially reasonable terms and conditions serves as a potential safety valve for those companies, ensuring that they can compete for end users nationwide without being held hostage by their competitors.[55] The Commission should impose a data roaming obligation on all of AT&T's services as a condition of approving this transfer.[56]

The Commission should prohibit AT&T from subdividing the market for wireless devices operating on beachfront spectrum by using devices from an exclusive band class not available to other carriers.[57] Competitors who hold nearby spectrum licenses in the 700 MHz auction possess far less market power than AT&T and consequently struggle to enter into

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[54] *See* Section II, *supra*.

[55] The National Broadband Plan recommended that the Commission act quickly in its open proceeding on data roaming, noting that "[d]ata roaming is important to entry and competition for mobile broadband services." *National Broadband Plan*, Recommendation 4.11 at p. 49.

[56] The issue of data roaming is currently pending before the Commission in an industry-wide rulemaking proceeding. *Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers and Other Providers of Mobile Data Services*, Order on Reconsideration and Second Further Notice of Proposed Rulemaking, WT Docket No. 05-265 (rel. Apr. 21, 2010). However, no order appears immediately forthcoming in that proceeding, and the Commission's legal authority to adopt data roaming rules has been challenged by AT&T along with other wireless carriers. Given AT&T's dominant market position, which would be increased by approval of this application, adoption of a data roaming obligation is essential to reduce harm and advance the widely-supported goals of data roaming.

[57] The Commission has sought comment on an industry petition requesting the adoption of industry-wide rules on device interoperability in the 700 MHz band. *Petition for Rulemaking Regarding the Need for 700 MHz Mobile Equipment to be Capable of Operating on All Paired Commercial 700 MHz Frequency Blocks*, Petition for Rulemaking, RM-11592 (filed Sept. 29, 2009) ("*Interoperability Petition*"). Although petitioners would welcome such action, none appears forthcoming, and the specific harms that AT&T can create by virtue of its market position justify adopting a device interoperability requirement as a condition of approval of this

business arrangements to offer devices that are most popular with users.[58] Broad adoption of the LTE standard for networks in the 700 MHz band could help address this problem by ensuring that the same devices commissioned and built to run on AT&T's and Verizon Wireless's LTE networks can also work on competing networks. However, business practices by the companies to subdivide band classes and ensure that the devices they use work only on their networks frustrate this potential and undermine the ability of smaller companies to compete. The Commission should therefore adopt as a condition of approving this application a requirement prohibiting AT&T from harming its competitors through unnecessary subdivision of band classes in 700 MHz.

The Commission should prohibit AT&T from harming its competitors through the use of exclusive deals for wireless devices. Exclusive deals for popular devices confer a substantial competitive advantage to a wireless network operator because increased smartphone adoption spurs a significant portion of growth in mobile subscriptions.[59] Should this dynamic be extended into LTE networks, where more competing carriers share a technological standard and the ability to offer the same physical devices, exclusive deals would undermine the significant potential for competition offered by harmonization around the LTE standard. The Commission should therefore prevent AT&T from using its dominant market position to create such harm.[60]

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application.

[58] *See id.* at 3, 6.

[59] *See, e.g.*, Suzanne Choney, *Smart phone growth explodes, dumb phones not so much*, MSNBC Technolog (Feb. 7, 2011), *available at* http://technolog.msnbc.msn.com/_news/2011/02/07/6005519-smart-phone-growth-explodes-dumb-phones-not-so-much.

[60] As with device interoperability, the Commission has sought comment on adopting industry-wide restrictions on such practices, pursuant to a petition filed by competing carriers. *Rural Cellular Association Petition for Rulemaking Regarding Exclusivity Arrangements Between Commercial Wireless Carriers and Handset Manufacturers*, Petition for Rulemaking, RM-11497 (filed May 20, 2008). However, the Commission does not appear to be contemplating adoption of any such rules. Furthermore, as with data roaming and device interoperability, AT&T's

Obligations concerning device interoperability and exclusive agreements relate directly to this transaction.[61] The spectrum at issue is in the 700 MHz beachfront spectrum and will be used for LTE networks, and many of AT&T's competitors who would seek to offer the same wireless devices also hold nearby 700 MHz spectrum licenses and seek to use them for LTE networks.[62] Consequently, any activity by AT&T to use its market position, provided in part by its 700 MHz spectrum holdings including the potential addition of the Qualcomm licenses, to segregate the device market through either exclusive agreements or through subdivision of the band class would have a direct and harmful impact on its competitors by limiting their ability to offer a broad array of new and popular devices along with their services. Choice of device is a significant factor in consumer decisions among competing service providers,[63] and actions by AT&T to limit its competitors' options would have substantial harmful impact.

The Commission should prohibit AT&T from trapping subscribers into long term contracts backed by excessive early termination fees. These fees harm both users *and* AT&T's competitors: The fees make it substantially harder to win subscribers away from AT&T services.[64] Early termination fees that exceed actual loss represent a windfall for the network operator and a punitive trap for end users. If an early termination fee does not exceed the difference between the price paid by the network operator to the device manufacturer and the

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dominant market position enables sufficient risk of harm to warrant a transaction-specific obligation regarding exclusive deals.

[61] *See generally Clearwire Order* at para. 95 (declining to adopt obligations on exclusive deals for failure to establish a nexus to the transaction).

[62] *See generally Interoperability Petition*.

[63] *See, e.g.*, Comments of Free Press and Media Access Project, *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. 10-133, at 20 n.68 (identifying numerous sources indicating the influence of popular devices on consumer choice, even at the expense of poorer wireless service).

[64] *Id.* at 5 (citing the Commission's recent report on wireless competition).

price paid by the end user for the device, and if the fee is prorated on an even basis down to zero at the termination of the initial contract, then that fee adequately compensates for any loss associated with a mid-contract change in service provider. If a larger early termination fee is assessed, or if the fee is not evenly prorated, then it produces a windfall for the service operator, punishes users who switch, and discourages users from switching. The Commission should therefore impose conditions that limit AT&T's ability to discourage competition by charging excessive early termination fees to customers who wish to switch providers.

The Commission should prohibit AT&T from engaging in anticompetitive behavior in the offering of its vertically integrated special access and backhaul services to its competitors. Adequate backhaul is crucial to successful deployment of mobile broadband networks, and as a vertically integrated wireless service provider, AT&T can often provision its own backhaul. However, competing wireless carriers in many areas throughout the country rely on backhaul provided by AT&T. Many competing wireless carriers have been alleging widespread abuse in the offering of special access and other backhaul services, prompting the Commission to commit to reviewing its rules governing such offerings.[65] This application would increase AT&T's ability to offer mobile broadband service in beachfront spectrum and would therefore increase AT&T's incentive to stifle competition. To remove barriers to entry and high costs for competitors, the Commission must prevent AT&T from abusing its vertically integrated services to stifle competition.

Finally, the Commission should require AT&T to phase out the universal service high cost support AT&T receives for its wireless services unless AT&T provides an actual cost

[65] The Commission held a staff workshop on this issue on July 19, 2010. *Public Notice, Wireline Competition Bureau Announces July 19, 2010 Staff Workshop to Discuss the Analytical Framework for Assessing the Effectiveness of the Existing Special Access*, WC Docket No. 05-25 (rel. June 30, 2010).

analysis.[66] The Commission is currently considering reform of the high cost fund,[67] but while this process is underway, efforts to rein in costs of the fund continue. In fact, at least one recent study has demonstrated considerable inefficiencies in uses of the fund by many providers.[68] Reducing unnecessary expenses of the fund while reform efforts remain pending would complement the other proposed conditions in this petition in ensuring that the transaction overall does not cause more harm than good for the public interest.

Respectfully Submitted,

_____/s/_____

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Mar. 11, 2011

[66] *See Clearwire Order* at paras. 106-08.
[67] *Id.* at para. 108.
[68] Scott Wallsten, Technology Policy Institute, *The Universal Service Fund: What Do High-Cost Subsidies Subsidize?*, Feb. 2011, *available at* http://www.techpolicyinstitute.org/files/wallsten%20universal_service_money_trail_final.pdf (finding that 59 cents of every dollar of funding paid through the high cost fund is spent on general expenses and not direct support for lines).

## CERTIFICATE OF SERVICE

I, M. Chris Riley, hereby certify that on this 11th day of March, 2011, a copy of the foregoing Petition to Deny is being sent via first class, U.S. Mail, postage prepaid, to the following:

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