Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
Preserving the Open Internet	)	GN Docket No. 09-191
Broadband Industry Practices	)	WC Docket No. 07-52

COMMENTS OF METROPCS COMMUNICATIONS, INC.

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

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

Its Attorneys

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MetroPCS Communications, Inc. ("MetroPCS"),[1] by its attorneys, hereby respectfully submits its comments on the *Further Inquiry Into Two Under-Developed Issues in the Open Internet Proceeding* ("*Further Inquiry*") released by the Federal Communications Commission (the "FCC" or "Commission") in the above-captioned proceeding.[2] In summary, MetroPCS opposes any regulation of either the Internet or Internet access by wireless providers, or broadband information services by providers of specialized services, because (1) the Internet has been a resounding success due to the lack of intrusive government regulation; (2) the Commission has not demonstrated market failure and the broadband marketplace currently is competitive; (3) wireless broadband and Internet access services are sufficiently different from

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

[2] *Further Inquiry Into Two Under-Developed Issues in the Open Internet Proceeding*, GN Docket No. 09-191, WC Docket No. 07-52, DA 10-1667 (rel. Sept. 1, 2010) ("*Further Inquiry*").

other broadband and Internet access technologies to merit a "hands-off" approach even if additional regulation is applied to other broadband and Internet access providers; and, (4) unnecessary regulation of specialized services will adversely impact investment and innovation throughout the broadband marketplace. In opposition, the following is respectfully shown:

I. INTRODUCTION AND SUMMARY

The *Further Inquiry* claims that the comments generated by the original *NPRM*[3] "appear[] to have narrowed disagreement on many of the key elements of the framework proposed."[4] MetroPCS disagrees. While the issues may have been brought into better focus, there still remains a wide gulf of disagreement.[5] MetroPCS and many others cited the serious problems and potential pitfalls associated with proposed net neutrality regulation that extend far beyond the two issues that the Commission has raised in the *Further Inquiry*. While MetroPCS applauds the Commission for wanting a robust record, MetroPCS reiterates its emphatic view that there is no evidence of market failure that justifies the overly broad and potentially harmful

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[3] *Preserving the Open Internet, Broadband Industry Practices*, GN Docket No. 09-191, WC Docket No. 07-52, FCC 09-93 (rel. Oct. 22, 2009) ("*NPRM*").

[4] *Further Inquiry* at 1.

[5] *Compare* Comments of: American Cable Association; 9 Carrier Association, Inc.; Telefonica, S.A.; Global Crossing North America, Inc.; Motorola, Inc.; GSM Association; Charter Communications; CTIA – The Wireless Association; AT&T Inc.; Leap Wireless International, Inc. and Cricket Communications, Inc.; Independent Telephone & Telecommunications Alliance; Cisco Systems, Inc.; Wireless Internet Service Providers Association; United States Telecom Association; National Cable & Telecommunications Association; Alcatel-Lucent; Qualcomm Incorporated; Ericsson Inc.; Cox Communications, Inc.; Sprint Nextel Corporation; Nokia Siemens Networks US LLC; Bright House Networks; Qwest Communications International Inc.; Comcast Corporation; T-Mobile USA Inc.; Verizon and Verizon Wireless; National Telecommunications Cooperative Association; SureWest Communications; Time Warner Cable Inc. *with* Comments of: Skype Communications S.A.R.L.; RNK, Inc.; Google Inc.; Vonage Holdings Corp.; Free Press; XO Communications, LLC; Sling Media, Inc.; DISH Network L.L.C.; Covad Communications Company; Open Internet Coalition; Public Interest Commenters.

proposed net neutrality regulations. Indeed, the Commission has failed to identify any actual harm in the market for broadband Internet access service, and has garnered no evidence indicating that far reaching government regulations are necessary. Accordingly, there is no reason for the Commission to impose game-changing rules at this time. Rather, the Commission should take great care to preserve the robust level of competition and innovation that currently exists in the market for broadband Internet access. By listening to the whispers of phantom harm, and seeking to apply a solution where there is no problem, the Commission risks killing the goose that lays the golden eggs by damaging a critical source of jobs and investment and stifling American technological innovation.

The net neutrality mandates being considered by the Commission are both unprecedented and unwise. Despite a complete absence of evidence of competitive harms in the market, the Commission proposes to dictate the nature of services to be offered by carriers, how broadband Internet access providers should run their businesses and interact with their customers, and whether and how they offer new and innovative services. Setting aside the obvious negative intended effects such regulation would have, this approach also is certain to produce significant harmful unintended consequences.

While draconian net neutrality regulations should not be applied to any provider of broadband Internet access service, MetroPCS believes that wireless broadband Internet is particularly ill-suited for such regulation. Wireless providers of broadband Internet access are severely constrained by the critical shortage of broadband wireless spectrum. The spectrum crisis is certain to grow due to consumers' increasing appetite for wireless data services. In order to manage this rising tide of data use, wireless carriers simply must be able to control the services they offer, the design of their rate plans, and the applications and devices that operate on

their networks. Without this ability, carriers lose the ability to dictate network operations, and all customers will suffer losses of efficiency and security. Indeed, since spectrum is unevenly divided among all carriers, these rules could have a significant adverse impact on competition and innovation, as smaller carriers are unable to provide services using a one-size-fits all approach. Network access also has substantial cybersecurity and public safety considerations, and the Commission must tread carefully when regulating in this area.

Finally, any proposed net neutrality regulations must contain an exemption for specialized services. As a provider of specialized services, including its new MetroNavigator℠ and MetroSTUDIO℠ services, MetroPCS knows first hand safeguards that are necessary to efficiently devote network resources for such services. The rules being considered in the *Further Inquiry* would effectively regulate specialized services out of existence. Yet, each of the Commission's "three general areas of concern" with respect to specialized services is entirely speculative.[6] It is under the pretext of these phantom harms that the Commission proposes to turn all providers of specialized services into open pipe broadband Internet access providers[7] – whether their spectrum resources, networks and business models can support it or not. This will have a damaging effect on investment and innovation, at the very time when the Commission should be supporting the growth and development of important specialized services.

In sum, the Commission has provided no compelling evidence – and in fact has provided no evidence at all – that substantial harm exists in the marketplace that would warrant intrusive

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[6] *See Further Inquiry* at 2-3.

[7] *Id.* at 4 (proposing to "[r]equire broadband providers to continue providing or expanding network capacity allocated to broadband Internet access service, regardless of any specialized services they choose to offer"). Similarly, providers of specialized services would be required to "offer broadband Internet access service as a stand-alone service, separate from specialized services, in addition to any bundled offerings." *Id.* at 3.

net neutrality regulation. Further, the Commission must avoid enacting regulations that might have substantial unintended consequences on the broadband and Internet access industry. The Commission should defer to Congress in this sensitive area of regulating the Internet and broadband Internet access and instead should focus its attention on promoting competition for broadband and Internet access services for the benefit of all consumers by solving the spectrum crisis.

II. METROPCS' INNOVATIVE 4G LTE SERVICE AND SPECIALIZED SERVICES WILL BE NEGATIVELY IMPACTED BY THE PROPOSED REGULATIONS

MetroPCS offers wireless broadband mobile services, *e.g.*, Personal Communications Services ("PCS") and Advanced Wireless Services ("AWS"), in and around numerous metropolitan areas throughout the United States on an affordable, flat-rate unlimited usage basis, with no long-term contract. MetroPCS owns or has access to licenses covering a population of approximately 146 million people, and is constantly expanding its coverage to serve both new metropolitan areas and areas surrounding existing metropolitan areas. MetroPCS' customers are able to use their service nationwide both through MetroPCS' own facilities and through roaming arrangements. As of June 30, 2010, MetroPCS served approximately 7.6 million subscribers and is the fifth-largest facilities-based wireless provider in the United States based on number of subscribers served.

MetroPCS' service plans are differentiated from the more complex and long-term plans required by many of its competitors by being affordable, predictable and flexible. Customers pay for service in advance, without a credit check, with service plans beginning as low as $40 per month, which includes taxes and regulatory fees. The low cost, fixed price, all-you-can-eat prepaid service offerings of MetroPCS have caused the large national carriers to begin offering unlimited, nationwide flat rate plans as well, either directly or through resellers. As such,

MetroPCS is a positive competitive force in the wireless market. Further, MetroPCS also provides competition to traditional wireline services. Based on MetroPCS surveys, a substantial portion of MetroPCS customers use their MetroPCS service as their primary or sole telecommunications service. And, a growing percentage of MetroPCS' customers – including many minority group members – use their handset as the primary or sole means to access the Internet.[8] MetroPCS also is serving a significant number of consumers who previously were bypassed by the wireless revolution since a significant percentage of MetroPCS customers are first-time wireless users.

While MetroPCS has enjoyed rapid growth and market acceptance, it is not resting on its laurels. For example, MetroPCS recently became the first carrier in the nation to launch a commercial 4G LTE data network, and the first carrier worldwide to make a dual-mode 4G LTE/CDMA phone commercially available – the Samsung Craft.[9] Thus far, MetroPCS has

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[8] A recent study by the Pew Research Center's Internet & American Life Project concluded that the number of African Americans accessing the Internet through wireless handsets jumped from 29 to 48 percent between December 2007 and April 2009. During this same time period, mobile Internet use jumped from 38 to 47 percent among English-speaking Hispanics. The study also found that "[t]he high level of activity among African Americans on mobile devices helps offset lower levels of access tools that have been traditional onramps to the internet, namely desktop computers, laptops, and home broadband connections," further underscoring the importance of the wireless Internet for widespread broadband adoption. John Horrigan, *Wireless Internet Use*, Internet & American Life Project, Pew Research Center, July 2009, *available at* http://www.pewinternet.org/~/media//Files/Reports/2009/Wireless-Internet-Use.pdf. *See also* Cecilia Kang, "Going wireless all the way to the Web, The Washington Post (Jul. 10, 2010), *available at* http://www.washingtonpost.com/wp-dyn/content/article/2010/07/09/AR2010070905521.html

[9] *See* "MetroPCS Launches First 4G LTE Services in the United States and Unveils World's First Commercially Available 4G LTE Phone," MetroPCS Press Release (Sept. 21, 2010), *available at* http://investor.metropcs.com/phoenix.zhtml?c=177745&p=irol-newsArticle&ID=1473355&highlight=; "MetroPCS Launches Commercial 4G LTE Services in the Dallas/Fort Worth Metroplex," MetroPCS Press Release (Sept. 29, 2010), *available at* http://investor.metropcs.com/phoenix.zhtml?c=177745&p=irol-newsArticle&ID=1475926&highlight= ("*MetroPCS 4G LTE Press Release*").

launched its 4G LTE service in Las Vegas and in the Dallas/Forth Worth Metroplex, with plans to continue its 4G network expansion throughout the year and into 2011. With its broadband LTE initiative, MetroPCS is providing consumers with an enhanced opportunity to "cut-the-cord" on the Internet, a more robust HTML browsing experience and multimedia applications operating directly on the subscriber's wireless handset. For example, this innovative wireless technology allows MetroPCS customers to access exciting new features, such as premium media content through the MetroSTUDIO^{SM} offering.[10] MetroPCS has chosen to launch its 4G services initially on an unlimited basis – which allows customers to use it as much as they like without having to worry about usage caps.[11]

MetroPCS has adopted LTE because it is a potentially disruptive technology that offers many times the capacity (and speed) of existing broadband solutions. Just as voice has gone wireless, the Internet is increasingly going mobile and MetroPCS has positioned itself as one of the leaders in this evolution of the broadband industry. In part, MetroPCS was incented to pursue this important technological upgrade by the Commission's current, competition-friendly, light-touch regulatory regime for broadband and Internet access services. The roll-out of this cutting-edge 4G technology requires that MetroPCS be able to design its services and to maintain control over its networks without unnecessary government intervention. 4G LTE service enables MetroPCS customers to access a dizzying array of digital media, applications and broadband Internet services, and consumer demand for data is sure to increase. MetroPCS must ensure that

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[10] MetroSTUDIO^{SM} offers customers "full-track downloads, ringtones and ring-back tones, as well as premium video content from NBC Universal, Black Entertainment Television (BET) and Univision." *See MetroPCS 4G LTE Press Release*.

[11] Depending on the Commission's ultimate regulations, MetroPCS may be forced to adopt tiered rate plans for data services. Since a very small percentage of users create the most usage, if MetroPCS is required to indiscriminately serve any application or handset, it may be forced to adopt such usage plans due to its limited spectrum resources.

it is able to preserve a high quality 4G LTE experience for all of its customers, not just for the few that use its service the most. Accordingly, MetroPCS cannot afford to have its network co-opted by abusive heavy users or by those who want to receive services that are not compatible with, or would create issues for, MetroPCS' network and its ability to serve all customers.[12] A network management exception is not sufficient if the Commission strips providers of the ability to design their services to fit the capabilities of their systems.

III. THERE IS NO REASON TO IMPOSE DRACONIAN AND UNNECESSARY NET NEUTRALITY REGULATION

The market for broadband Internet access service is booming, a fact that MetroPCS and others repeatedly have pointed out in this proceeding.[13] Competition and innovation are the norm. T-Mobile has correctly observed that the wireless broadband marketplace "embodies the 'virtuous cycle' of innovation and growth that has been expressly cited by the Obama Administration, and the public interest will be best served by further encouraging market forces to develop it without regulation."[14] SureWest indicates that "the Internet has been and is currently a tremendously successful facilitator of economic, cultural, social and political discourse, which has led to unprecedented increases in the nation's productivity."[15] And, Qwest notes that "[i]n the absence of intrusive regulatory intervention, competition is thriving in the broadband market and robust growth is evident."[16]

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[12] MetroPCS has an average of 20 MHz of spectrum in each area, and as little as 10 MHz in certain markets. In contrast, the two major carriers average between 80-90 MHz nationwide.

[13] *See, e.g.*, MetroPCS Reply Comments at 15 (noting that the current market for broadband Internet access is "an already competitive and thriving broadband marketplace").

[14] T-Mobile Comments at 6.

[15] SureWest Comments at 3.

[16] Qwest Comments at 8.

The Commission must recognize that its first duty must be *primum non nocere* – "first, do no harm." This is not a mere aspiration for the Commission; the Commission has a congressionally-mandated duty to "preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, unfettered by Federal or State regulation."[17] Using its current light-touch regulatory regime the Commission has done just that, and has overseen a golden age of broadband innovation. At this crossroad of Internet policy, rather than adopting an industrial policy that imposes command and control monopoly-style regulations on a functioning marketplace, the Commission should be seeking to nurture and promote even greater competition and innovation in the marketplace.

The Commission must be mindful that imposing net neutrality regulations, specifically the ones discussed in the *Further Inquiry*, may have substantial and harmful effects on broadband and Internet access and will have substantial unintended consequences, all of which may stifle investment and innovation. Unless the government itself is willing and able to invest substantial capital in the industry – which it should not do[18] – the FCC must be wary of the potentially adverse effect of its efforts on the capital markets and on investment. Indeed, the Commission's actions in this proceeding, and in the related "Third Way" proceeding, already have had negative repercussions in the marketplace. Industry watchdogs have cautioned that the "well-intentioned but nonetheless problematic third-way forward will engender increased

[17] 47 U.S.C. § 230(b)(2).

[18] MetroPCS does not believe that the government should invest in broadband networks. Rather, the proper role of government is to foster competition and investment by private parties by adopting competitive and investment-friendly policies.

regulatory uncertainty, decreased investment and adverse effects for consumers."[19] Indeed, the very act of the Commission indicating that it is considering such rules has created substantial uncertainty in the broadband industry, which may ultimately lead to reduced investment. The Commission must avoid spooking a fragile and recovering marketplace with the specter of, and actual, additional regulation, particularly as it seeks industry investment and assistance with accomplishing the important goals of the *National Broadband Plan*.[20]

With the *National Broadband Plan* goals in mind, the *Further Inquiry* asks "how best to maximize consumer choice, innovation, and freedom of expression in the mobile application space, while ensuring continued private investment and competition in mobile wireless broadband services."[21] But, these important questions have been asked and answered by the Commission before.[22] Then, as now, the answer is not for the Commission to further regulate mobile wireless broadband services by devoting time and attention to micromanaging the services offerings of the very carriers who are laboring to maintain beneficial services with insufficient spectrum resources, but rather to take bold steps to free up additional broadband spectrum to address the spectrum shortfall crisis, and to adopt other pro-competitive regulation –

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[19] Statement of Barbara Esbin Concerning the FCC's "Third Way" Internet Regulation Proposal, The Progress and Freedom Foundation, May 6, 2010, *available at* http://www.pff.org/news/news/2010/2010-05-06-Esbin_statement.html.

[20] FCC, CONNECTING AMERICA: A NATIONAL BROADBAND PLAN FOR OUR FUTURE, (2010) ("*National Broadband Plan*").

[21] *Further Inquiry* at 1.

[22] *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*, Notice of Inquiry, WT Docket No. 09-66, FCC 09-67, rel. Aug. 27, 2009; *Fostering Innovation and Investment in the Wireless Communications Market; A National Broadband Plan for our Future*, Notice of Inquiry, GN Docket No. 09-157, GN Docket Nos. 09-157 and 09-51, FCC 09-66, rel. Aug. 27, 2009.

such as eliminating handset exclusively.[23] Competition allows the market, rather than regulators, to determine how to meet consumer needs. Competition and the market brought the Internet as we know it into existence, and has nurtured its growth and continued development. Indeed, the Internet boomed when many ISPs were able to offer competitive and innovative services designed to meet customer needs. The Commission must preserve this open and deregulatory environment if it hopes to allow the Internet to continue to thrive, innovate and improve the lives of all Americans.

Set against this backdrop of admirable Internet innovation, MetroPCS is forced to wonder why the Commission now feels that new and disruptive, monopoly-style regulation of broadband Internet access is warranted. The Commission fails to make any concrete finding of actual harm that is occurring in the marketplace. The *Further Inquiry* provides not one single example of harm or abuse in the marketplace that would necessitate imposing new and unnecessary net neutrality regulations.[24] Each of the proposed policies is merely a solution in search of a problem. Indeed, much of this regulation harkens back to a bygone era when telecommunications was a government-regulated natural monopoly, and the regulators needed to stand in place of the market. Now, the FCC is dealing with a robustly competitive marketplace, and should not seek to apply these old-style monopoly regulations at the risk of running the competition currently in place.

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[23] The Commission should focus its efforts on this area. It is widely rumored that Verizon Wireless may soon acquire the right to sell the Apple iPhone. If Apple and Verizon Wireless are allowed to offer this product on an exclusive basis, it would have dramatic negative effects on competition in the wireless market. First, it would allow Verizon Wireless to do to CDMA carriers what AT&T was able to do the GSM rural carriers. Second, without Verizon Wireless' support, the competitive Android operating system may not reach its full competitive potential – which would further decrease consumer choice.

[24] *See generally Further Inquiry*.

The Commission's proposed actions are particularly ill-advised considering that Congress, the body from which the Commission derives its power, is in the midst of an active debate over net neutrality.[25] Congress, rather than the Commission, is the preferred representative body to resolve the spirited debate over the propriety and proper scope of net neutrality regulation. The Commission should not preempt Congress and hastily adopt sweeping controversial regulations in the absence of congressional direction. Rather, the Commission should allow Congress to consider both the scope of the Commission's jurisdiction in this complex area, and the manner in which that jurisdiction should be exercised. If, instead, the Commission rushes to a premature judgment, there no doubt will be moves in Congress to block or overturn the Commission decision, which will create turmoil in the broadband market which would be antithetical to the goal of rapid deployment. This is especially true since the Commission's first efforts to impose net neutrality have been rejected by the Courts as being outside the Commission's authority.

Deferring to Congress at this time also will allow industry discussions to continue. The much-discussed Verizon-Google Legislative Framework Proposal[26] represents progress in certain areas, but any agreement must be endorsed by more than just two industry giants to succeed. The reality is that Verizon is in a position to take on certain net neutrality obligations

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[25] Kim Hart, "Net neutrality bill stillborn," Pittsburgh Post-Gazette (Sep. 30, 2010), *available at* http://www.post-gazette.com/pg/10273/1091500-473.stm (noting Waxman and Baucher indications that "efforts at a [net neutrality] bill will resume during a lame duck session"); *see also* Jon Healey, "Waxman's last-minute Net neutrality bill hits a GOP wall," Los Angeles Times (Sep. 29, 2010), *available at* http://latimesblogs.latimes.com/technology/2010/09/wa.html (noting that net neutrality legislation "could conceivably resurface during the planned lame-duck session").

[26] "Verizon-Google Legislative Framework Proposal," rel. Aug. 9, 2010, *available at* http://static.googleusercontent.com/external_content/untrusted_dlcp/www.google.com/en/us/googleblogs/pdfs/verizon_google_legislative_framework_proposal_081010.pdf.

that small, rural and mid-tier carriers with limited spectrum and capital resources cannot bear. Unfortunately, small, rural and mid-tier carriers – and wireless-only carriers – were not well represented during the Commission's closed-door net neutrality discussions.[27] Nor were they brought into the bilateral Verizon-Google talks. Rather than impose command and control regulatory policies, the Commission should defer to industry groups to formulate appropriate policies. If the such groups are unable to come up with appropriate policies, then, and only then, may it be appropriate for the Commission to act. The current course is not desirable because not all voices have been adequately heard with respect to the net neutrality debate. For example, certain industries which the Commission might think would be in favor of net neutrality – such as the on-line gaming industry – are in fact opposed to additional regulation of the Internet.[28]

IV. THE MANDATES BEING CONSIDERED BY THE COMMISSION TO "PROTECT" THE OPENNESS OF THE INTERNET ARE BOTH UNPRECEDENTED AND UNWISE

Viewed as a whole, the "protections" being contemplated by the Commission would discourage carriers from developing and providing beneficial niche services to the very customers who demand them. The general policy approaches being considered alone or in combination to address potential (yet entirely undefined) concerns with regard to specialized services are draconian, contrary to competitive free-market principles, and will stifle innovation

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[27] Cecilia Kang, "FCC draws fire over talks with Internet, telecom giants on 'net neutrality'," The Washington Post (Aug. 5, 2010), *available at* http://www.washingtonpost.com/wp-dyn/content/article/2010/08/04/AR2010080406910.html.

[28] Alex Wawro, "Is Net Neutrality Good for Gaming?" PCWorld (Jan. 23, 2010), *available at* http://www.pcworld.com/article/187533/is_net_neutrality_good_for_gaming.html (quoting Ryan Radia, Associate Director of Technology Studies at the Competitive Enterprise Institute, "Barring ISPs from offering prioritized traffic means more delays, and gamers notice congestion much more readily than the average consumer. In the absence of net neutrality guidelines, service providers are free to experiment with competitive service plans that minimize game lag.").

and investment. Prohibiting certain advertising,[29] requiring carriers to offer broadband Internet access as a stand-alone service,[30] limiting specialized service offerings[31] and dictating how much capacity a carrier must devote to providing or expanding broadband Internet access services,[32] all represent long rejected industrial policy, unprecedented and unwarranted government intrusions and ill-advised micromanagement. Fine distinctions about what services can be offered, how those services must be offered, what other services they must be coupled with and the terms of service should not be dictated by a top-down regulatory regime. Broadband Internet access providers simply must have the nimbleness and flexibility to manage these decisions on their own. A business – particularly in the ever-evolving and constantly-innovating technology sector – must be fleet-of-foot or it will find itself quickly outpaced by competition from inside or outside of the industry. The Commission must not be the ball and chain around the ankle of marketplace innovators.

The hallmark of the market based approach – which has been used successfully by the Commission in promoting innovative wireless services – is that the market, not a regulatory agency, dictates what services will be offered and how. This allows new entrants and others to innovate and design their services to meet special market needs and fill the requirements of consumers. In many cases, once these smaller innovators prove the success of a particular service and start having commercial success, the larger carriers will adopt the model in order to better compete. This has occurred with innovative flat-rate prepaid services. For example, MetroPCS and Leap Wireless started offering unlimited services on a no-long term contract

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[29] *Further Inquiry* at 3.

[30] *Id*.

[31] *Id*. at 4.

[32] *Id*.

basis. Once the MetroPCS and Leap Wireless business plans proved viable and they started to take market share from the larger incumbent carriers, the larger incumbent carriers were forced to begin offering a similar service. Market forces will not work in this pro-competitive way if the Commission dictates that a carrier must offer a service in a particular way.

In essence, if the Commission's proposed regulations are applied, the offering of Internet access will cause companies to lose control over their services and their business. This is a frightening prospect for investors and for those currently in control of broadband Internet access providers. In the past, non-discrimination meant that carriers had to serve all customers indiscriminately. Now, however, non-discrimination appears to mean that a carrier must allow its competitors unfettered access to its networks. While this may have made sense to spur competition for monopoly services, or in cases where a carrier has a dominant market position and is using it to stifle competition – such as with data roaming, such regulation has no place in a world where there has been no market failure and competition already exists – particularly robust competition of the type currently found in the market for broadband Internet access. In a competitive market, carriers must be allowed to decide what services they want to offer to meet unsatisfied consumer needs.

This is especially true for smaller wireless carriers who are forced to make difficult choices about where and how to deploy capital and use their limited spectrum resources. Unlike their larger competitors, the smaller wireless carriers typically are unable to pay dividends out of their excess cash. Rather, the funds generated by operations are reinvested in the network to better serve their customers. The ability to design services means that a wireless carrier can maximize its investment by choosing which services to offer, the appropriate limitations, and the price of the service. For example, because of its limited spectrum resources and the additional

bandwidth required to provide certain services or to serve certain devices, MetroPCS has decided not to allow tethering devices, nor to offer data cards, netbooks, or tablets at this time. Further, MetroPCS has reserved to itself the ability to determine whether certain applications, such as peer-to-peer file sharing, is permitted on its network. All of these decisions are appropriate in a world where the carrier can decide what service it wants to offer and to price it accordingly. However, if the Commission dictates that if a carrier offers a specialized service – such as video clips – it has to allow anyone else to use whatever technology it wants to provide video clip access – no matter how inefficient and disruptive to the management of the network. Such a circumstance will cause the carrier either to not invest or to offer only the same service as everyone else.[33] This will "kill the goose that lays the golden eggs." Private investment spurs the virtuous cycle of innovation and competition and, if private investment does not flow into the sector because a carrier cannot differentiate itself, competition and the public will suffer.

V. NET NEUTRALITY REGULATION MUST NOT BE APPLIED TO MOBILE WIRELESS PLATFORMS

Wireless broadband providers live in a different world than do wired broadband providers. The finite capacity of wireless systems and the inability of wireless carriers to acquire additional spectrum capacity when needed are clear distinguishing factors. Network infrastructure (including spectrum and the shared nature of wireless systems), integration of customer equipment and the competitive landscape also make wireless significantly different. Indeed, Commission itself has recognized that there are "technological, structural, consumer usage and historical differences between mobile wireless and wireline/cable networks" and that

[33] In essence, a carrier would be forced to become a "dumb pipe" unless it had the capacity to allow any device, any application and any service.

"cellular wireless networks are shared networks (as are some types of wireline networks), with limited resources typically shared among multiple users."[34]

Wireless providers have a limited amount of bandwidth with a finite capacity to use to provide services to their customers. The Commission has specifically acknowledged the spectrum crisis wireless providers face in today's marketplace.[35] Indeed, politicians,[36] government agencies,[37] members of the communications industry[38] and consumer groups all have admonished the Commission to alleviate the spectrum crunch before the wireless industry is stifled.[39] MetroPCS itself is no stranger to the problem of obtaining sufficient spectrum to provide deeper and more robust service offerings and to grow its business both technologically and geographically. Indeed, the problems caused by the current "woefully inadequate" spectrum allocations will only be exacerbated in the future, "particularly as the wireless industry evolves

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[34] *NPRM* at ¶ 154.

[35] *See, e.g.*, Prepared Remarks of Chairman Julius Genachowski at the International CTIA Wireless I.T. & Entertainment Convention, "America's Mobile Broadband Future," Oct. 7, 2009, at 4, available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-293891A1.pdf (stating that "the biggest threat to the future of mobile in America is the looming spectrum crisis").

[36] A recent letter from Senator Olympia Snow made several recommendations regarding how to "solve the looming spectrum crisis." Letter from Senator Olympia J. Snow to Julius Genachowski, Chairman, Federal Communications Commission, Jan. 5, 2010, at 2.

[37] *Comment Sought On Spectrum for Broadband; NBP Public Notice # 6*, GN Docket Nos. 09-47, 09-51 and 09-137, DA 09-2100, rel. Sept. 23, 2009.

[38] MetroPCS Comments in GN Docket Nos. 09-157 and 09-51, filed Sept. 30, 2009 at 3; *see also* T-Mobile USA Comments in GN Docket Nos. 09-157 and 09-51, filed Sept. 30, 2009; Sprint Nextel Comments in GN Docket Nos. 09-157 and 09-51, filed Sept. 30, 2009 at 3; CTIA Comments GN Docket Nos. 09-157 and 09-51, filed Sept. 30, 2009 at 67.

[39] Indeed, the national media has noted that "The FCC's [spectrum] push has few critics. Consumer groups, wireless service providers, equipment manufacturers, educators and President Obama have called for the need." Cecilia Kang, "FCC Moves on Spectrum Draw New Attention to Washington," The Washington Post (Nov. 3, 2009), *available at* http://voices.washingtonpost.com/posttech/2009/11/television_stations_like_cw21.html.

in an increasingly data-centric world."[40] In sum, while MetroPCS believes that no provider of broadband Internet access should bear the yoke of net neutrality regulation, it must be recognized that any such regulation would have a particularly harmful effect on wireless broadband and Internet access providers.

In order to provide suitable high quality services to subscribers within this limited bandwidth, wireless companies must be in a position to manage the customer experience and control and shape the services subscribers may access. Otherwise, a disproportionately low number of a wireless service provider's subscribers may use the lion's share of available bandwidth, to the detriment of other subscribers. The problem of excessive use by a few is not merely theoretical. As just one example, it was estimated by AT&T that just 3 percent of smartphone users consume 40 percent of the bandwidth.[41]

Unfortunately, the proposed Commission remedy – allowing carriers to implement reasonable network management techniques – provides little if any comfort. No doubt any third party who is denied access to a network, either for a device or an application, will file a complaint. Even if the carrier prevails in defending its network management techniques, it will have expended precious financial and personnel resources in the process. These resources are better devoted to building and operating improved networks. Also, as has been pointed out in a thoughtful analysis filed by AT&T,[42] network management techniques will be changing rapidly in a quickly developing data marketplace. This means that adjudications concerning permissible

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[40] MetroPCS Comments at 36.

[41] Caroline Gabriel, "AT&T Sounds Deathknell for Unlimited Mobile Data," Rethink Wireless, (Dec. 10, 2009), *available at* http://www.rethink-wireless.com/article.asp?article_id=2239.

[42] *See* Exhibit 1 to AT&T Reply Comments, Dr. Jeffrey Reed and Dr. Nishith Tripathi, "Wireless Net Neutrality Regulation: A Response to Afflerbach and DeHaven" at 6 (Apr. 26, 2010).

and impermissible network management techniques will provide little if any useful guidance to carriers since yesterday's approach is of only historical interest. The result will be a never ending torrent of litigation. Further, network management presupposes some ability of a carrier to design its services so as to be able to enforce its rules and ensure the health of its network. If a carrier must service all customers and all applications and services, a network management function merely acts as a traffic cop in a traffic jam, rather than as a city planner who tries to eliminate the problem by designing the services offered to the capabilities of the system.

To that end, to a large extent, the net neutrality rules presuppose that the ISP is primarily a "dumb pipe." However, wireless networks are complex telecommunications systems that require the integration of voice, data and other services. As such, devices and applications can affect the operation and efficiency of the networks. Further, net neutrality rules fail to take into account the fact that voice and data services often ride over the same wireless facilities, which makes network management and the ability of a wireless carrier to shape their offerings of paramount importance. The Commission simply must recognize that wireless providers of broadband and Internet access have substantially different and more severe constraints on their ability to add capacity than do their wired counterparts. Armed with this understanding, the Commission must not seek to impose unnecessary net neutrality regulations on those providers that are least able to absorb the substantial burden associated with such regulations.

A. Usage-Based Pricing for Broadband Internet Access is Not the Solution, But Rather is a Symptom of the Problem

It is very disturbing to MetroPCS that usage-based pricing is mentioned by the Commission as a possible "solution" to the net neutrality problem.[43] The *Further Inquiry* appears to take some comfort in the prospect that AT&T and Leap Wireless have indicated a possible desire to go with usage-based pricing in the long term.[44] Properly viewed, metered data pricing is merely a symptom of the lack of available capacity caused by a shortage of spectrum, and should not be viewed as a desirable, long-term network management solution. There are a number of problems with the Commission's suggestion that these pricing models may provide a temporary solution to the network management problems that face wireless broadband Internet access providers.

First, not all carriers are willing to, or are able to, move to usage-based pricing for wireless data.[45] Second, consumers and application developers have made clear their desire for the certainty and ease of unlimited data plans, rather than risk unpleasant monthly "bill-shock" with usage-based pricing.[46] Indeed, it is non-sensical for the Commission to consider usage-based pricing a "solution" – thereby increasing consumer uncertainty with respect to their monthly wireless bills – at the same time that it has initiated a proceeding to curb the unwanted

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[43] *Further Inquiry* at 5.

[44] *Id.* at 5.

[45] Sue Marek, "MetroPCS committed to unlimited data via LTE," FierceWireless (Sept. 22, 2010), *available at* http://www.fiercewireless.com/story/metropcs-committed-unlimited-data-lte/2010-09-22?utm_medium=nl&utm_source=internal (noting that "MetroPCS will continue delivering prepaid unlimited broadband data to its customers and is not planning to implement any tiered pricing plans").

[46] Spender E. Ante, "AT&T's Wireless Pricing Shift Will Test Behavior," The Wall Street Journal (Jun. 3, 2010), *available at* http://online.wsj.com/article/SB10001424052748704025304575284961190193360.html ("*Ante Article*").

monthly "bill shock" that consumers experience.[47] If consumers are "shocked" at the number of minutes that they are using, imagine how they will react to usage-based data bills.[48] And, while providing advance consumer alerts that charges are about to exceed a certain level may reduce the number of billing surprises, they also will reduce beneficial uses of the phone by consumers who cannot afford to pay more. These consumers would much rather have an unlimited usage plan at a fixed fee. The Commission should not be forcing carriers to be required to adopt usage-based pricing, in contravention of consumer preferences and against stated the Commission desire to increase certainty with respect to monthly wireless bills. Third, usage-based pricing demonstrates not that all carriers should be forced into such pricing measures, but rather that the current deregulatory environment is working. Carriers are adopting the tiered-pricing model, in some instances, to protect themselves from excessive usage, while others may be adopting it as a means to offer lower priced data services. Either way, the important thing is that the current environment promotes diversity in services. Net neutrality regulations would decrease flexibility and consumer choice, which is not the right answer.

The critical spectrum shortage discussed above and the desire to garner additional market share, combined with the explosion of wireless data use by consumers, is driving some carriers to implement usage-based pricing plans. The Commission should strive to encourage consumer choice, and not choose winners and losers in the marketplace. There is an important place in the market for unlimited providers and tiered data providers, and the Commission should not encourage or discourage one or the other by adopting harmful net neutrality regulations. In

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[47] *Comment Sought on Measures Designed to Assist U.S. Wireless Consumers to Avoid "Bill Shock"*, Public Notice, 25 FCC Rcd 4838 (CGB 2010).

[48] This is especially true since the average consumer has no idea how much data typical Internet activities may consume, unlike easily-tracked voice minutes.

addition, usage based pricing may become even more restrictive if net neutrality principles are applied to wireless. For example, if usage caps currently are set at 5 GB/month with providers being allowed to adequately manage their networks, the application of net neutrality regulations may send that number spiraling downwards, to 1 GB or less per month. As applications and services continue to innovate and develop, users will feel ever-more constrained by these shrinking limits on wireless data. Industry insiders have opined that "today's heavy user is tomorrow's average user,"[49] meaning that usage caps that seem reasonable today will substantially hamper tomorrow's wireless consumer. Simply put, dictating one or the other wireless data pricing model is not the answer. Consumers want choice – the choice to purchase either fixed-price unlimited usage plans or by-the-minute usage plans, and net neutrality regulations that dictate one over the other will not serve the public interest.

Dictating usage-based pricing also will have a chilling effect on the use of important wireless services. Unlimited service pricing allow users to access their chosen service whenever doing so is necessary or useful. This is what some consumers want. However, since many users do not want to keep track of precisely how much data they are making use of – even if means are available to do so – usage limits tend to discourage even economic use because customers want to avoid additional charges. Even usage limits that are set above "average" consumer use may have this effect. With this understanding of consumer behavior in mind,

[49] Jeff Gelles, "Watch out for trap in new AT&T pricing," Philadelphia Inquirer (Jun. 2, 2010), *available at* http://www.philly.com/philly/business/technology/New_iPhone_charges_The_new_New_Coke.html.

> developers of mobile-device software worry that [usage caps] could prompt consumers to fret about exceeding their data allotments each time they consider downloading a new game or firing up an application. Such hesitance could dim the growth prospects of the wireless-application market just as it is getting off the ground.[50]

With applications and software bringing exciting new technologies to mobile platforms daily, the Commission should do everything in its power to encourage the development of this market. Instead, by forcing carriers toward a one-size-fits-all pricing scheme in its effort to enhance the "openness" of the Internet, the Commission will be creating a perverse disincentive for consumers to avoid the very new technologies and applications that the Commission seeks to protect through its misguided proposed net neutrality regulations.

B. Transparency

MetroPCS supports principles of transparency regarding offered services in order to empower consumers, but does not support overreaching transparency rules with respect to device and network information. Rather, MetroPCS supports clear and accurate advertising and descriptions of each service that is being provided. As an initial matter, MetroPCS believes such regulations are already in place at the Federal Trade Commission ("FTC"), and does not believe that other regulations are necessary or appropriate. These transparency rules allow customers to make an informed choice, which in turn allows competition to drive new services and pricing innovation. However, while transparency that informs consumer decisions is desirable, transparency requirements that go beyond the current regulations may arm those who want to harm a broadband network with the knowledge to do so.

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[50] *Ante Article*.

Mobile wireless providers must protect the security of their networks, and must not be required to give cyber-terrorists a roadmap for attack. The Commission, Congress and the Obama Administration all have acknowledged the increasing risks associated with cyber-security.[51] Numerous cyber-security bills are being considered in Congress, and the Commission recently took comment in two different proceedings exploring important cyber-security issues.[52] As MetroPCS previously has stated, "[a]ny disclosures required under this principle should be necessarily general, and not contain specific protocols or applications or other detailed descriptions of how network management is performed."[53] The Commission also should keep in mind that a number of consumer disclosure requirements may be regulated by the FTC or other federal agencies, and fall outside the purview of the FCC. Wireless providers are subject to a myriad of consumer protection regulations, and are not permitted to mislead consumers in advertising materials or at the point-of-sale. The rules that are presently in place have successfully created a robustly competitive marketplace for wireless broadband Internet services. Keeping in mind its primary duty to "first do no harm," the Commission should not impose additional disclosure requirements that will increase the regulatory burdens on a competitive marketplace and may arm cyber-criminals with additional information about network infrastructure.

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[51] "Cyber-security in Congress," The Economist (Aug. 3, 2010), *available at* http://www.economist.com/blogs/democracyinamerica/2010/08/cyber-security (noting that "[t]he Obama administration has been trying on its own to figure out how to get those businesses to enhance their cyber-security" and that "[i]n recent months, two Senate committees have approved major bills and the House has passed legislation of its own").

[52] *See Cyber Security Certification Program*, PS Docket No. 10-93 and *National Broadband Plan Recommendation to Create a Cybersecurity Roadmap*, PS Docket No. 10-146 and GN Docket No. 09-51.

[53] MetroPCS Comments at 64.

C. Devices

The *Further Inquiry* also "seek[s] further comment on the ability of new technologies and business models to facilitate non-harmful attachment of third-party devices to mobile wireless networks."[54] This proposal unjustifiably seeks to apply a *Carterfone* standard to providers of wireless broadband Internet access.[55] The Commission should not apply this dated *Carterfone* framework which was designed to break a monopoly stronghold on wireline devices to an industry that is thriving and boasts new devices and applications every single day. The circumstances surrounding the *Carterfone* decision were entirely different than those that currently face the wireless broadband Internet access industry. The *Carterfone* decision was imposed during an era of a government-sanctioned equipment and service monopoly. The current mobile equipment and wireless sectors currently are competitive at a retail level. As MetroPCS and others have stated, "the market for broadband services is competitive, and growing more so every day."[56] Further, "[u]nlike the situation during the pre-*Carterfone* era for wireline services and equipment, broadband providers rarely produce their own equipment and instead rely on market forces to innovate and develop new equipment."[57] There simply is no need to apply regulation, that was intended to break up an equipment-and-services monopoly, to an industry where the sale of equipment and services is widespread among competitors, and presently is subject to vigorous competition at all levels. It also is not clear that many of the

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[54] *Further Inquiry* at 5.

[55] *Use of the Carterfone Device in Message Toll Telephone Service; Thomas F. Carter and Carter Electronics Corp., Dallas, Tex. v. American Telephone and Telegraph Co., Associated Bell System Companies, Southwestern Bell Telephone Co., and General Telephone Co. of the Southwest*, Decision, 13 F.C.C. 2d 420 (1968) ("*Carterfone*").

[56] MetroPCS Comments at 13.

[57] *Id.* at 54.

current equipment developments would have occurred, or would have occurred as quickly, without the carriers' involvement. As the Commission is aware, the wireline single-line telephone has not advanced technologically since the early 1930's, even with *Carterfone*. If the Commission imposed the same regulation on wireless, it should not be surprised by a similar response.

Carriers may chose to allow devices and applications which are not sold (nor approved) by them onto their networks. For example, today many carriers allow customers to bring their own handsets to the network. However, the Commission should not dictate that carriers allow any device or application on to its network. For example, some carriers, like MetroPCS, do not offer certain services which may be enabled by a particular device – such as data cards. Accordingly, MetroPCS should not be forced to accept data cards on its service. Once again, the choice should be the carrier's, and the appropriate mechanism to ensure that market needs are satisfied is competition, not regulation.

The Commission also seeks comment on whether the "deployment of next-generation technologies (*e.g.*, LTE) [will] further facilitate interoperability."[58] In many ways, this question presents a false reality of the market for wireless broadband Internet access as it exists today and is likely to exist in the future. Although it appears that the industry is headed towards greater interoperability as we move towards 4G, numerous competing standards still remain. The industry currently is dominated by the split between the CDMA and GSM air interfaces, and 4G services may find themselves split among the incompatible LTE and WiMAX standards and Time Division Duplex ("TDD") and Frequency Division Duplex ("FDD") technologies. Sprint Nextel and Clearwire have jointly built an extensive TDD WiMAX network, and cable

[58] *Further Inquiry* at 5.

companies also have joined on to the TDD WiMAX standard to power their wireless broadband offerings.[59] On the other hand, MetroPCS, AT&T and Verizon Wireless, among others, all have announced their intention to operate their 4G networks via the FDD LTE standard. However, worldwide other countries have allocated spectrum for TDD LTE and Clearwire has indicated it may offer TDD LTE in addition to, or in lieu of, TDD WiMax. Accordingly, the industry may yet again find it itself in a GSM/CDMA-type split, without the type of standards convergence that the Commission envisions. In addition, even those carriers who do move to common technical standards, such as 4G LTE, may not find interoperability as simple as the Commission may imagine. Though such a common standard would aid interoperability among networks, providers must still tightly control the devices that connect to their networks. Doing so is the only way to ensure stability of the network, which is of paramount importance to wireless operators. Further, even if devices operate using the same wireless standard, they may work only over certain spectrum bands. For example, an LTE device designed for use with cellular, PCS and AWS frequencies would be incompatible with another operator's 700 MHz network. If the Commission truly seeks to promote device and network interoperability, it should focus its attention on taking action on the 700 MHz Block A Good Faith Purchaser Alliance Petition for Rulemaking.[60]

Network, technical, cyber-security and liability issues also are implicated when carriers are unable to control which devices jump on and off of their networks. Devices connecting to a

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[59] Stephen Lawson, "Time Warner Cable to Join WiMax Fray," PCWorld, (Jul. 30, 2009), *available at* http://www.pcworld.com/businesscenter/article/169368/time_warner_cable_to_join_wimax_fray.html.

[60] *700 MHz Block A Good Faith Purchaser Alliance Petition for Rulemaking Regarding the Need for 700 MHz Mobile Equipment to be Capable of Operating on All Paired Commercial 700 MHz Frequency Blocks*, Petition for Rulemaking, RM No. 11592, filed Sept. 29, 2009.

wireless network operate under the system operator's blanket license, meaning that the carrier, not the device owner, is ultimately responsible for device transmissions. If the Commission allows any device to be placed on a wireless carrier's network, the Commission will be requiring the wireless carrier to become responsible for the operation of (and presumably interference created by) units which it does not know about, and may in fact not be completely compatible with the network. Such an arrangement creates substantial liabilities for wireless operators, liabilities that they would find themselves frighteningly unable to mitigate. MetroPCS has also expressed great concern about managing technical issues if all devices are allowed to connect to its wireless network. For example:

> [CDMA] systems require extensive power control in order to allow the system to operate. If the device does not have that power control, or it does not work in the same fashion as the assumptions underlying the network design, the device may end up interfering with other users. However, such interference would be extremely difficult to determine as the user may be mobile and the interference may be intermittent.[61]

Further, it is unclear how E-911 obligations would work. Carriers currently are required to make sure consumers are able to access E-911 services, and carriers are required to meet certain location accuracy standards. Without control over the device, it is not clear how a carrier should or could be responsible for complying with these standards.[62]

Because of the technical, cyber-security and liability issues raised above, *Carterfone*-like rules would significantly increase the costs of conducting business, as such rules may require companies to rigorously test all devices for use on their networks. Given the sheer number of

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[61] MetroPCS Comments at 56.

[62] This would be especially problematic for voice over Internet protocol ("VoIP") services running on the wireless carrier's network. Since wireless devices are mobile, the current requirement that a customer provide an address to its provider is especially problematic with respect to wireless services.

potentially-compatible wireless devices, such an undertaking would constitute a substantial burden on wireless providers. Financial and human resources would be diverted to this onerous task, likely taking away from the important customer service and innovation functions that such resources are now devoted to. This would be particularly harmful to small- and medium-sized carriers, which have limited resources – resources that would be better spent on delivering new and innovative products and services to customers.[63] Furthermore, MetroPCS and other carriers have succeeded in competing with larger incumbent carriers by maintaining a low cost structure that enables them to deliver service at a comparatively low price. Government mandates that impose a "one size fits all" obligation on carriers serve to erode the cost advantage that MetroPCS and others strive to maintain and, ultimately, will harm competition.

Perhaps most importantly, forcing carriers to allow all compatible devices to connect to their network would force carriers to enter businesses that they never intended to go into. For example, MetroPCS does not offer USB modems or allow "tethering" of its wireless phones to computers. This business decision was thoughtfully made for significant reasons (including the need to offer handsets and services which consume fewer resources in order to ensure the provision of reliable voice and data services to all of its customers), and has proven to be a successful one, as evidenced by consumers' favorable view of MetroPCS service and pricing, and the company's rapid rise as a disruptive competitor in the wireless space. The Commission's ill-advised "any device" rule would have the effect of forcing MetroPCS to go into the "tethering" business – despite its having decided not to do so.

[63] This burden would be disproportionate on small and mid-tier carriers, as they would have to test all handsets even though, due to capacity and other limitations, such carriers may only be able to serve a small fraction of those handsets.

Forcing MetroPCS to permit tethering may also have substantial negative implications for network congestion. Users of tethering devices generally consume greater bandwidth than users of a wireless handset by itself,[64] meaning that networks that were never intended to support such a service may find themselves crippled by unanticipated data use by a few tethering customers. To avoid this undesirable result, broadband Internet access providers must be allowed to define the services they offer and configure the network to accommodate such services. It would be one thing if MetroPCS was selling its own brand of data cards in its retail stores while denying data access to users with cards secured from others. However, this is not the current market reality. As a result, it should be deemed presumptively reasonable for a carrier to restrict all data card uses in order to manage system capacity and to limit handsets that may use or have different network features, functionality and services than the ones that they carrier sells. In essence, the Commission should let the market determine winners and losers, and not dictate business models to providers. Chairman Genachowski has recognized this truth, stating that "[the FCC] has done best for the country when it has encouraged free and open markets, when its rules have empowered consumers to pick winners and losers, and when it has enabled innovators to innovate without permission."[65] By implementing net neutrality principles, the Commission will be disregarding its own advice and dictating to the market how it should operate.

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[64] Stacey Higginbotham, "AT&T Explains Its Pricing Change: It's All About Value," GigaOm (Jun. 2, 2010) (AT&T Senior VP Mark Colling noting that with multiple device connections available, "[y]ou're going to use more data"), *available at* http://gigaom.com/2010/06/02/att-explains-its-pricing-change-its-all-about-value/.

[65] Prepared Remarks of Chairman Julius Genachowski, Federal Communications Commission, "Innovation in a Broadband World," The Innovation Economy Conference, 2009 FCC LEXIS 6271 (FCC 2009) ("*Genachowski Innovation Speech*").

D. Applications

The *Further Inquiry* also contains a number of questions about the degree to which mobile wireless providers should have control over the applications that are run on their networks, either through dedicated phone "apps" or through the broadband Internet, and sold in provider-run app stores.[66] MetroPCS believes that these fine distinctions are best left to the market, and should not be included in any formal net neutrality rules adopted by the Commission. In addition, there are no signs that the app market is anything but robustly competitive, and the Commission should not take action where none is necessary.

At the present time, the Commission's concerns about a mobile broadband provider "acting both as a network operator and an app store curator" are unfounded.[67] Once again, the Commission has pointed to no instances of actual harm in the marketplace. In fact, if anything, evidence exists to the contrary. By any measure, the market for wireless apps is extremely competitive, innovative and is growing rapidly. As of September 1, 2010, the Apple App Store had 250,000 distinct third-party apps and over 6.5 billion total downloads. As of August 1, 2010 the Android Market had over 20,000 apps and over 1 billion total downloads. In addition to the Apple and Android app stores, BlackBerry, Nokia, Verizon and many others have application marketplaces. The fact that device manufacturers, network operators and content providers all operate app stores is clear evidence that the Commission's concerns about anti-competitive market behavior and vertical integration are merely speculative and decidedly premature.

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[66] *Further Inquiry* at 5-6.

[67] *Id.* at 5.

In addition, there are no signs that wireless consumers find themselves unable to obtain the apps that they desire. For example, recent studies indicate that "just 5 percent of respondents have unlocked their cellular phone so they could get access to apps that aren't available to them."[68] This means that for 95 percent of consumers, the applications available to them are sufficient to meet their needs. This is evidence that consumer demands are satisfied by available apps, and app store curators are not unnecessarily blocking apps from their stores for anticompetitive purposes.[69] Indeed, many wireless phones even run apps that directly compete with services that carriers offer. Google Voice, Skype and Google Maps are each available on a substantial number of wireless handsets.[70] This shows just how well the market is working – consumer demand dictated that these applications be available on wireless handsets, and the market had no choice but to respond by making them available. The vigorous competition in the wireless industry means that consumers are willing and able to vote with their feet. A wireless provider that refuses to provide its consumers with the apps that they demand, or significantly restricts its customers' ability to purchase and/or run the apps that they desire, will find itself losing customers to providers or platforms that are willing to provide such flexibility. For

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[68] Sue Marek, "Study: Preloaded apps generate more money for operators," FierceDeveloper (Sept. 21, 2010), available at http://www.fiercedeveloper.com/story/study-preloaded-apps-generate-more-money-operators/2010-09-21.

[69] The bigger problem may be too many applications creating confusion in the market. For example, Apple has not opened up its app store to all applications because it wants to ensure that it not have "app overload." Indeed, a recent survey revealed that fully 45 percent of users said that they did not know what to download, and 40 percent said that there were too many choices. *See* Andrew Berg, "Wading Through a Sea of Apps," WirelessWeek (Sep. 26, 2010), *available at* http://www.wirelessweek.com/Articles/2010/09/Mobile-Content-Sea-of-Apps-Mobile-Applications/.

[70] For example, Skype VoIP service is available on Verizon Wireless (*see* http://phones.verizonwireless.com/skypemobile/) and Google Voice is available on a variety of mobile platforms, including standalone app versions on BlackBerry and Android phones (*see* http://www.google.com/mobile/voice/).

example, the sale of Android phones recently has outpaced the sale of iPhones,[71] likely due in no small part to the greater openness of the Android platform and the greater availability of apps in the Android Market. Importantly, the majority of available market evidence directly contradicts the Commission's concerns that mobile broadband providers unnecessarily are restricting apps that compete with their products or services. Further, users can side load applications onto handsets as well and bypass the carrier's application store altogether. Accordingly, there is no compelling reason for the Commission to involve itself in the relationship between wireless broadband Internet access providers and curators of wireless app stores.

The *Further Inquiry* also asks to "what extent should mobile wireless providers be permitted to prevent or restrict the distribution or use of types of applications that may intensively use network capacity, or that cause other network management challenges."[72] The ability "to prevent or restrict the distribution or use of types of applications that may intensively use network capacity" is absolutely critical for wireless broadband Internet access providers. Barring this discretion, carriers lose control over the services that they offer, and a small number of abusive users can ruin the wireless experience for the majority of users.[73] Indeed, the inability to restrict the applications that operate on a company's network is likely to lead more carriers to adopt usage-based pricing, and those that currently have usage-based pricing to further restrict customer data limits. Given the current spectrum shortage that is facing the U.S. wireless

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[71] David Sarno, "Google's Android army outselling iPhone, research firm says," L.A. Times (May 10, 2010), *available at* http://latimesblogs.latimes.com/technology/2010/05/google-android-overtakes-iphone-npd-research.html.

[72] *Further Inquiry* at 5.

[73] *See, e.g.*, Caroline Gabriel, "AT&T Sounds Deathknell for Unlimited Mobile Data," Rethink Wireless, Dec. 10, 2009, *available at* http://www.rethink-wireless.com/article.asp?article_id=2239.

industry,[74] mobile wireless operators simply must be able to pick the applications which run on their network to prevent undue congestion. Further, carriers need to be able to restrict the types of applications which may involve illegal activities – such as the dissemination of copyrighted works, child pornography and the like. Certain applications are more likely to be involved in these kinds of activities than others, and carriers should be able to determine the uses of its services by its subscribers. For example, many of MetroPCS' customers may not want their children to have access to applications which may circumvent filtering software that MetroPCS has put in place at the parent's request.

The *Further Inquiry* once again discusses usage-based data pricing as a possible solution to network management in connection with the use of data-intensive applications.[75] And, again, the Commission fails to see that metered pricing may be the symptom of a larger problem rather than a viable solution to deal with abusively data-intensive applications. Carriers may not be moving to usage-based pricing because of consumer demand. Instead, carriers may be moving to a usage-based pricing model in response to insufficient spectrum resources or in an effort to differentiate their services. Carriers that have already adopted data caps are likely to further reduce those caps if the Commission adopts unnecessary net neutrality regulations for mobile wireless providers. Metered pricing will not solve this problem, but instead will merely discourage customer use of new and innovative products and services.

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[74] Prepared Remarks of Chairman Julius Genachowski at the International CTIA Wireless I.T. & Entertainment Convention, "America's Mobile Broadband Future," Oct. 7, 2009, at 4, available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-293891A1.pdf (stating that "the biggest threat to the future of mobile in America is the looming spectrum crisis").

[75] *Further Inquiry* at 5.

Finally, it is important to note that applications, much like wireless equipment, can have the effect of permitting uses of the network that the carrier specifically has chosen not to permit. For example, software applications could turn certain wireless handsets into personal WiFi hotspots, which could dramatically increase the data usage from customers using these applications. In addition, such software would allow different types of services to flow over a mobile operator's network, which the network may or may not be designed to handle. This runs the risk of not only curtailing other legitimate use by other customers, but also of potentially harming the network infrastructure. Wireless operators must be permitted to restrict these uses in order to preserve the wireless experience for all of their customers.

VI. SPECIALIZED SERVICES SHOULD BE EXEMPTED FROM ANY PROPOSED NET NEUTRALITY REGULATIONS

In the original *NPRM* that initiated this proceeding, the Commission recognized that "managed or specialized services may differ from broadband Internet access services in ways that recommend a different policy approach, and it may be inappropriate to apply the rules proposed here to managed or specialized services."[76] MetroPCS agreed with this reasoned and restrained approach, stating that "there should be an exception to any net neutrality regulation for [specialized] services."[77] Others also echoed a desire that specialized services be exempted from net neutrality regulation, particularly with the increasing convergence of voice and data applications: "[A]s wireless carriers the world over adopt 4G wireless broadband technologies, voice becomes another application delivered wirelessly using IP, rather than the *raison d'être* of the network itself."[78] The Commission was right to take a cautious approach to specialized

[76] *NPRM* at ¶ 149.

[77] MetroPCS Comments at 69.

[78] Ericsson Comments at 26.

services, as these important services are often on the cutting edge of Internet innovation. Indeed, the *Further Inquiry* cited commenters who indicated that specialized services are likely to "drive additional private investment in networks and provide consumers new and valued services."[79] After acknowledging that these "new and valued services" are popular with and important to consumers, the *Further Inquiry* paradoxically suggests that specialized services effectively be regulated out of existence. The Commission should not take this completely unfounded and dangerous step towards stifling innovation.

MetroPCS has a substantial interest in the Commission's treatment of specialized services, as it offers a number of specialized services as part of its dynamic product offering to its customers and has plans to offer even more as the ecosystem for 4G LTE fully develops. As MetroPCS' customer base has grown, so has the number of exciting specialized services that are available to be delivered to a subscriber's handset. For example, MetroPCS recently announced MetroSTUDIO℠, "a new source of multimedia content, including access to full-track downloads, ringtones and ring-back tones, as well as premium video content from NBC Universal, Black Entertainment Television (BET) and Univision, available on-demand and on-the-go from one easy-to-use application."[80] In addition, MetroPCS offers the MetroNavigator℠ specialized service with voice-activated GPS and turn-by-turn directions.[81] In the cases of both MetroSTUDIO℠ and MetroNavigator℠, MetroPCS has taken steps to shape the specialized traffic so that it will not overly burden the network. These specialized services are in high demand by consumers, and are a popular feature of the overall MetroPCS wireless services

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[79] *Further Inquiry* at 2, n.9.

[80] *MetroPCS 4G LTE Press Release*.

[81] *See* MetroNavigator information page: http://www.metropcs.com/products/metronavigator/.

offering. Yet, the willingness or ability of MetroPCS to maintain or expand these innovative services clearly is compromised by the proposed regulations under consideration in the *Further Notice*. Should the Commission choose to apply net neutrality regulation to specialized services, it runs the risk of significantly dampening a hotbed of wireless innovation, to the detriment and displeasure of consumers. Before even public interest considerations are taken into account, however, it is important to recognize that all of the "harms" set forth in the *Further Inquiry* are merely speculative – surely mere conjecture as to what may occur cannot be the basis for broad and overreaching regulation.

1. There is No Market Evidence to Suggest that Specialized Services Are In Need of Additional Regulation

While the Commission has been hard pressed to point to actual harm in the broadband Internet access marketplace throughout this proceeding,[82] there has been no problem with respect specialized services. Indeed, with specialized services the Commission is putting the cart way before the horse. The *Further Inquiry* fails to point to even one example of how specialized services were used for anticompetitive purposes. The Commission references "three general areas of concern" – and yet the entire discussion of competitive harms is speculative in nature.[83] This improperly assumes harm in the marketplace and provides absolutely no evidence thereof. Specifically, the *Further Inquiry* points to the following three "harms" in the marketplace – all completely ephemeral:

[82] MetroPCS Comments at 17 (noting that in the *NPRM* "[t]he Commission cites only two examples of the type of conduct that 'warrants closer attention'" and could support additional regulation) (emphasis in original).

[83] *Further Inquiry* at 2.

- "Open Internet protections may be weakened if broadband providers offer specialized services that are substantially similar to, but do not technically meet the definition of, broadband Internet access service."[84]

- "Broadband providers may constrict…network capacity allocated to broadband Internet access service in order to provide more capacity for specialized services."[85]

- "Broadband providers may have the ability and incentive to engage in anti-competitive conduct with respect to specialized services…[and] [s]uch discriminatory conduct could harm competition."[86]

As is clear from the three "general areas of concern" above, the Commission is chasing ghosts. There has not been a single enforcement action (let alone a single complaint) against broadband Internet access providers in connection with abusing specialized services, nor is there market-based evidence that remotely suggests that such conduct is likely to occur. Prior to enacting any net neutrality regulation that covers specialized services, the Commission should step back and consider whether such regulation is necessary or advisable. Upon doing so, it will find that the answer is a clear "no." The Commission should instead endeavor to support the development of specialized services, rather than applying overly-broad regulations that will harm the investment and innovation that specialized services bring.

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[84] *Id.*

[85] *Id.*

[86] *Id.* at 3.

2. Applying Net Neutrality Regulation to Specialized Services Will Harm Investment and Innovation

In addition to the fact that no evidence of actual harm in the marketplace supports the application of net neutrality regulations to specialized services, MetroPCS also is particularly concerned with certain specific aspects of the Commission's regulatory proposals.[87] For example, the suggestion that specialized services be limited to those that "cannot be provided via broadband Internet access service"[88] creates such a broad category that it is difficult to dream up a specialized service that fits such a definition. Truthfully, it is hard to say that something – even the telemedicine example given by the Commission[89] – "cannot" be provided via the traditional broadband Internet. In focusing on whether a service "can" be provided over the traditional broadband Internet, the Commission misses an important aspect of the debate. The question is not whether it is possible for such a service to be provided over the traditional broadband Internet, but rather whether these specialized services can be or would be provided in a <u>better</u> manner over dedicated bandwidth, with specialized network services, thus enhancing the consumer experience. Movies, for example, can be, and in fact are, provided over the broadband Internet. Yet a consumer may be particularly interested in a specialized service that streams HD movies, and providers may be willing to offer such a service. Although this service "can" be provided over the traditional broadband Internet, it may be more at risk to suffer from jittery performance. In addition, due to limitations on mobile Internet browsers, a customer's favorite

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[87] *Id.* at 3-4. The Commission lists "six general policy approaches" to addressing its speculative concerns with respect to specialized services: (1) Definitional Clarity; (2) Truth in Advertising; (3) Disclosure; (4) Non-exclusivity in Specialized Services; (5) Limit Specialized Service Offerings; and (6) Guaranteed Capacity for Broadband Internet Access Service.

[88] *Id.* at 4.

[89] *Id.*

movie website may be unavailable away from home.[90] Thus, that consumer's experience would be enhanced by a specialized service from their mobile provider offering movies on-the-go – despite the fact that such movies also "can" be offered over the traditional broadband Internet.

Further, the most desirable content may not be available unless the content provider is certain that illegal copyright piracy will not occur. Due to this requirement, the type of content being provided by a provider – such as through MetroSTUDIO^{SM} – may not practically be available any other way. Content providers want the digital rights management ("DRM") features of specialized services because they can ensure that only a single copy is made and only paying customers are able to obtain access to such content. Further, by offering such content through specialized services, the carrier may be able to optimize the content so as to enhance the customer experience. For example, carriers can shape traffic so as to make it more efficient to be offered over smaller bandwidths.[91] No matter what regulations are enacted, the Commission should never be in the business of prohibiting carriers from providing a beneficial service to customers that is responsive to marketplace demands.

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[90] For example, Netflix, a popular website that allows users to stream movies instantly, is not available on the majority of mobile browsers. So, to watch such movies online, users will need a dedicated application or perhaps a specialized service offered by their wireless provider – despite the fact that the movies are also offered over the traditional broadband Internet. *See, e.g.*, Liane Cassavoy, "Hands On: Netflix App for iPhone Looks Good," PCWorld (Aug. 26, 2010), *available at* http://www.pcworld.com/article/204215/hands_on_netflix_app_for_iphone_looks_good.html.

[91] For example, video streaming generally is unavailable on 1xRTT due to speed limitations. However, via traffic compression technologies, MetroPCS is able to offer video streaming for certain sites over 1xRTT. If MetroPCS did not have this ability, its customers would suffer.

MetroPCS also is particularly concerned about the Commission's proposal for guaranteed capacity for broadband Internet access service. As written, this proposal suggests that if a carrier offers any specialized service, that carrier also must offer broadband Internet access separately.[92] This once again is likely to have the effect of precluding certain business models and picking winners and losers in the market, against stated Commission policy.[93] This fear of such a requirement reducing innovative new service offerings is far from mere speculation. There are a number of service providers that use wireless spectrum to provide specialized services only, and the Commission's proposed regulations risk turning each of these companies into unwilling providers of broadband Internet access service providers. One example of such a provider is FLO TV, operated by Qualcomm in a number of markets over broadcast spectrum. FLO TV provides live mobile television, certain on-demand content, as well as the ability to interact with media content and advertisements, all over a dedicated wireless network.[94] Clearly, this product offering provides a niche service to consumers, and is neither advertised nor intended to act as a broadband Internet access service. Under the Commission's proposed rules, however, FLO TV may be required to "offer broadband Internet access service as a stand-alone service, separate from specialized services, in addition to any bundled offerings."[95] Such a requirement is likely

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[92] *Further Inquiry* at 4 (proposing to "[r]equire broadband providers to continue providing or expanding network capacity allocated to broadband Internet access service, regardless of any specialized services they choose to offer"). Similarly, providers of specialized services would be required to "offer broadband Internet access service as a stand-alone service, separate from specialized services, in addition to any bundled offerings." *Id*. at 3.

[93] *See, e.g.*, *Genachowski Innovation Speech*.

[94] *See* "FLO TV to Expand its Offering with Interactive, On-demand Content and Time-shifted Viewing," FLO TV Press Release (Apr. 13, 2010), *available at* http://www.flotv.com/news-room/press/2010-04-13.

[95] *Further Inquiry* at 4.

to overwhelm a dedicated network, and may have the effect of putting specialized service providers like FLO TV out of business entirely.

Further, it is not clear how such a service could be offered using the technology deployed by Qualcomm. If Qualcomm were required to offer Internet access or else not offer FLO TV, then it probably would not offer FLO TV. It is not clear how forcing carriers to choose serves the public interest. And, even if specialized-only services are not precluded, the Commission's proposed regulations are likely to eliminate "casual Internet access" in combination with specialized services. Amazon, for example, allows users a limited Internet experience via the Kindle as a customer convenience – not necessarily with the intent to replace the more robust Internet experience delivered over a wireless handset or a wired desktop computer connection. Under the FCC's proposal, there mere act of allowing casual access to the Internet could eliminate the very specialized services that the device is intended to provide.

As is shown by the above examples, adopting premature rules based on speculative harms is likely to deter services that are being offered today and may have substantial unintended consequences. By placing limits on the types of business models companies can pursue, or which entities can offer which products, the Commission may preclude the development new and important services. The market for wireless specialized services, in particular, is in its nascence, and should be allowed to develop without undue regulatory burden or interference from the Commission. Truthfully, years ago no one would have imagined that wireless delivery of e-books would revolutionize the way that Americans read and purchase literature. Yet now, the Amazon Kindle is "the most gifted item in Amazon's history,"[96] and has become near-ubiquitous

[96] "Amazon Kindle is the Most Gifted Item Ever on Amazon.com," Business Wire, Press Release (Dec. 26, 2009), *available at*

(continued...)

on subways and airplanes across the country and around the world. The Commission's proposed rules may limit innovators' appetite for creating the next Kindle, as they will be stymied by what such devices can and cannot do, and the manner in which a specialized service may be provided.

For example, the proposed rules may preclude Amazon or other entities from streamlining their delivery process by obtaining their own spectrum and operating their own delivery network. Amazon may decide that it is more efficient to deliver Kindle titles to consumers directly via a specialized service over a small slice of spectrum. Under the Commission's proposed rules, Amazon may also be forced to offer broadband Internet access – even though they never intended their e-book delivery service to be used for such a purpose. Further, Amazon may even be required to allow tethering of its Kindles or other devices to laptops over this small slice of spectrum, completely destroying the utility of its delivery network and its pricing model.[97] Worse yet, Amazon may be forced to allow anyone to attach any device, which could eliminate content providers' willingness to offer content via Amazon's service. The Commission's speculative rules, if adopted, would preclude this type of innovation. The same may be said for any number of other innovations that remain on the drawing board or in the imagination. A wireless video game delivery and interactive game play system over dedicated spectrum would also be implicated, as could any number of exciting new technologies that are merely the germ of an idea today. The fact is, no one can even dream of what the next innovation will be and what form it might take. By adopting rules to counter phantom harms, the process of invention and innovation will be severely disrupted. Instead of battling ghosts, the

(...continued)
http://www.businesswire.com/portal/site/home/permalink/?ndmViewId=news_view&newsId=20091226005004&newsLang=en.

[97] Amazon does not charge for the web browsing or the downloading of books. Any charge is included in the purchase price of the book.

Commission should instead turn its time and attention to policies that promote competition, investment and innovation in the broadband marketplace.

VII. CONCLUSION

The foregoing premises having been duly considered, MetroPCS urges the Commission to refrain from applying net neutrality regulations to broadband and Internet providers and specialized services. In declining to apply intrusive and unnecessary regulations to these market sectors, the Commission will promote the investment and innovation that is so critical to accomplishing the goals set forth in the *National Broadband Plan*. Further, such regulation in no instance should be imposed on wireless broadband and Internet access services. The nascent markets for wireless broadband Internet access and for innovative specialized services should be allowed to flourish under the light-touch regulatory regime that has overseen the golden age of Internet innovation.

Respectfully submitted,

MetroPCS Communications, Inc.

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

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

Its Attorneys

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