Consumer Federation of America

Public Knowledge

"Cell Phone Text Messaging Rate Increases and the State of Competition in the Wireless Market"

Testimony
of

Joel Kelsey
Policy Analyst
Consumers Union

On behalf of
Consumers Union, Consumer Federation of America, Free Press, the Media Access Project and Public Knowledge

Before the

Senate Judiciary Committee
Subcommittee on Antitrust, Competition Policy and Consumer Rights

On

June 16, 2009

Chairman Kohl, Ranking Member Hatch and esteemed members of the Committee, thank you for the opportunity to testify before you, for the first time, on behalf of Consumers Union, the non-profit publisher of *Consumer Reports*[1] magazine, the Consumer Federation of America[2], Free Press[3], the Media Access Project[4] and Public Knowledge[5]. In addition to fighting for consumers in Washington, D.C., we also provide unbiased advice and educational materials to assist consumers in making marketplace decisions through our magazine and online products.

The wireless marketplace in the United States is growing at a breakneck pace. With over 270 million subscribers, wireless services have penetrated eighty seven percent of the total U.S. population.[6] However, the costs associated with cell phone use are growing just as quickly, while the number of providers is contracting. As more Americans are 'cutting the cord' and switching from wired to wireless services, increasing costs are reaching deep into the pocketbooks of the vast majority of American consumers.

---

[1] Consumers Union is a nonprofit membership organization chartered in 1936 under the laws of the State of New York to provide consumers with information, education and counsel about goods, services, health, and personal finance. Consumers Union's income is solely derived from the sale of *Consumer Reports*, its other publications and from noncommercial contributions, grants and fees. In addition to reports on Consumers Union's own product testing, *Consumer Reports* regularly carries articles on health, product safety, marketplace economics and legislative, judicial and regulatory actions that affect consumer welfare. Consumers Union's publications carry no advertising and receive no commercial support.
[2] The Consumer Federation of America is the nation's largest consumer advocacy group, composed of over 280 state and local affiliates representing consumer, senior, citizen, low-income, labor, farm, public power an cooperative organizations, with more than 50 million individual members.
[3] Free Press is a national, nonpartisan organization working to reform the media. Through education, organizing and advocacy, we promote diverse and independent media ownership, strong public media, and universal access to communications.
[4] MAP is a non-profit, public interest law firm dedicated to promoting the public's First Amendment right to access a diverse marketplace of ideas in mass media. For over 37 years, MAP has promoted the public interest before the Federal Communications Commission, the Federal Trade Commission, and the U.S. Courts, advocating for an open and diverse telecommunications system that protects the free flow of information, promotes universal and equitable access to communications and technology services, and encourages vibrant public discourse on critical issues facing our society.
[5] Public Knowledge is a Washington DC based public interest group working at the intersection of communications policy and intellectual property law. Public Knowledge seeks to ensure that all layers of our communications system are open and accessible.
[6] *See* CTIA, "Wireless Quick Facts: Year End Figures," *at* http://www.ctia.org/media/industry_info/index.cfm/AID/10323.

While much of my testimony today will focus on the growing rates of text messaging – a service where prices continue to increase for consumers despite representing a fixed cost for wireless providers – I would also like to apply a broader lens to bring into focus the mobile phone marketplace as a whole and the many irregularities consumers are experiencing. In this testimony I plan to look at the non-competitive increases in text message pricing; provide an outline of what we view as weak structural competition in the marketplace; detail several consumer abuses that result from these inadequate competitive pressures; and offer a few brief solutions to encourage more competition. A more detailed analysis submitted to the Federal Communications Commission by public interest groups can be found as the appendix to this written testimony.

TEXT MESSAGE PRICING

Wireless carriers have heavily adopted parallel, and increasing, pricing structures to maintain high text messaging rates. Since 2003, the price of text messaging has quadrupled for some carriers.[7] More recently, since 2005, every major carrier has at least doubled the prices for text messaging from ten cents to twenty cents per message.[8] This rising cost in service is a head-scratcher to consumers, because text messaging uses less data than almost any other service on a wireless network. Six hundred text messages contain less data than one minute of a phone call.[9] If we put that into dollars and cents, at twenty cents per text, those six hundred messages would cost $120 for the equivalent of a one minute phone call.

---

[7] Now charging 20 cents to send and receive text messages, in 2003, T-Mobile charged as little as 5 cents per message to customers who did not sign up for a monthly text messaging plan. Kristin Dizon, "Text Messaging Makes Cell Phones Even Hotter Among Kids," *Seattle Post-Intelligencer*, September 30, 2003, http://www.seattlepi.com/lifestyle/141809_texting30.html [accessed June 9, 2009].

[8] Marguerite Reardon, "The Rising Cost of Texting," *CNet News*, July 1, 2008, http://news.cnet.com/8301-10784_3-9982251-7.html [accessed June 9, 2009].

[9] One prominent wireless carrier's codec transmits at approximately 12.2 kilobits per second (kbps). 12.2 kilobits is the same amount of data as 10.89 completely full text messages. Furthermore, those numbers assume users fill all 160 characters, but most of us don't even come close. Assuming senders use only 20 characters on average, 3,240 texts have less data than one minute of phone airtime, and would cost $648 at the per message rate (not including costs to the receiver, $1296 if we include them).

These price increases for text message services appear to indicate a failure of competition, because the increases are manifestly unnecessary to cover provider costs. The cost a carrier incurs by transmitting an SMS message has not increased in recent years.

Text messaging files are very small, and the price of their transmission is negligible for the provider. A message travels as a wireless signal from the handset, through the wired telephone network, and as a wireless signal to the receiving handset. The text message is a free rider inside a so-called "control channel," or space that is already being used to operate the wireless network. In other words, text message does not use up any extra spectrum – once the carrier pays the cost of the underlying infrastructure and storage equipment. Thus, any revenue received by the provider on incremental text message usage is nearly pure profit.[10]

AT&T has documented a six-fold increase in the number of text messages within two years.[11] With the fixed costs associated with text messaging, as the explosion of texting unfolds, carriers should be experiencing economies of scale and sharing that savings with consumers. However, this profitability is not shared with the consumer, as price points for texts continue to rise. Instead, according to an industry analysis, average revenue per texting subscriber has risen 150% in the last four years.[12]

Perhaps even more troubling is that this most recent wave of text message increases came within mere months of one another among each of the four major carriers. Sprint was the first to raise its rates to twenty cents per message in October of 2007; followed by Verizon in March of 2008; AT&T waited thirty days to follow suit; and T-Mobile acted last in August of 2008. There is no indication that these carriers colluded in any way. However, conscious parallel behavior in the marketplace produces the same harm for consumers – we end up paying higher prices for services that should be selling for a little more than the cost of providing the service. At the very

---

[10] Randall Stross, "What Carriers Aren't Eager to Tell You About Texting," *The New York Times*, December 28, 2008, http://www.nytimes.com/2008/12/28/business/28digi.html [accessed June 9, 2009].

[11] McKone, Timothy (Executive Vice President, AT&T). Letter response to: Honorable Herbert Kohl (Chairman, Subcommittee on Antitrust, Competition Policy and Consumer Rights, US Senate). 2008 October 6. Available at: http://kohl.senate.gov/ATT%20LT%20100608.pdf

[12] Randall Stross, "What Carriers Aren't Eager to Tell You About Texting," *The New York Times*, December 28, 2008, http://www.nytimes.com/2008/12/28/business/28digi.html [accessed June 9, 2009].

least, the rising text message rates provide indication that there are inadequate competitive pressures in the marketplace.

We were relieved to see these apparent abuses of market power were so troubling that they prompted Senator Kohl (D-Wisconsin) to send a letter to all four major carriers questioning the nature of these rate hikes.[13] In response to the inquiry, providers were quick to point out to their monthly texting plans, which can charge users as little as 1 cent for a single message, or provide unlimited messaging for a flat fee. However, the carriers neglected to explain why the price of *individual* text messages, for customers who choose not to buy a monthly plan, has increased. In their written responses, the carriers also failed to address why all four companies raised the prices for individual messages by equal amounts at largely identical times. In other words, they failed to acknowledge Senator Kohl's concerns about the potentially anticompetitive nature of their pricing practices for individual text messages.[14] In a competitive market, providers should be fighting to gain subscribers by lowering prices for low-cost services instead of raising them.

A CONSOLIDATED MARKET STRUCTURE

The rising rates of text messages provide a window into the increasingly consolidated market structure of the U.S. wireless market place. We believe the parallel pricing practices highlighted through text messages is one example of inadequate competitive pressures and insufficient competition at the structural level of the wireless marketplace. The U.S. wireless marketplace has become dangerously concentrated through mergers and acquisitions, causing one former Federal Communications Comission Chairman to state:

> Right now the policy of the FCC has been to encourage AT&T and Verizon to become the twin Bells that dominate the wireless business. They're allowed to buy all the spectrum they can find. The anti-trust laws are waived and ignored every time they appear to be a problem. The FCC is the only spectrum auction entity in the world that does not carve out spectrum for new entrants. They do it in Mexico, Canada, the UK, China and Japan. Only here does the new entrant not get much of a chance. This is the only country in the world where the rule is the big guys can buy all of it. When you consolidate service providers, just like in the old days, when there was not two Bells like today but one, everybody knows what happens.15

---

[13] The Honorable Herb Kohl. Chairman, Subcommittee on Antitrust, Competition Policy and Consumer Rights, US Senate. Letter to: Lowell McAdam, Randall Stephenson, Dan Hesse, Robert Dotson (Verizon Wireless, AT&T, Sprint, T-Mobile). 2008 September 9. Available at: http://kohl.senate.gov/LT%20-%20cell%20ph%20CV.pdf

[14] Reponses available at: http://kohl.senate.gov/increasing-rates-for-wireless-services.cfm

[15] Reed Hundt, "Interview with Ed Gubbins," Telephony Online, 28 Feb 2008. http://telephonyonline.com/broadband/news/reed-hundt-auction-0228/ (accessed June 2009).

The “big four” largest wireless carriers (Verizon, AT&T, Sprint, T-Mobile) clearly dominate the wireless marketplace in the United States, collectively representing just over 90% of the subscriber base[16], with the top two firms representing over 65% of the subscriber market.

In 1993 Congress created a classification for the Commercial Mobile Radio Services (CMRS) and established the aim of promoting competition in this market as a fundamental goal for CMRS policy and regulation. Each year, the Federal Communications Commission submits annual reports analyzing competition in the wireless marketplace. In the last report (the *Thirteenth Report*), FCC gave a weighted national average HHI of 2674 to the wireless marketplace.[17] Under general antitrust analysis, HHI levels above 1800 are considered “highly concentrated.”[18] An HHI level above 1800 in any individual economic area (EA) indicates severely limited competition under traditional analyses. Of the 171 EAs reported in the *Thirteenth Report*, exactly one had HHI under 1800 – and barely, at 1795.[19]

A deeper examination of the EA data in the *Thirteenth Report* paints a bleaker picture than even the high average HHI of 2674 indicates. Economies of scale should indicate a pattern across the EAs under which urban areas have more competitors and lower HHI than rural areas because competitors have more to gain from competing aggressively in those markets. Instead, according to 2007 data, both the most and least competitive regions are the most rural, demonstrating distortions that would not be expected in a competitive environment.[20] Furthermore, many EAs demonstrate substantially higher than average HHIs, ranging from the 4000s into the low 6000s.

---

[16] Based on SEC filings or corporate press releases publicly available and reflect customer figures as of 3/31/09: Verizon Wireless (86.6 million customers); AT&T (78.232 million customers); Sprint (49.083 million customers); T-Mobile (33.2 million customers). Total customers served by "Big 4" - 247,115,000

CTIA claimed 270.3 million wireless customers as of 12/31/08. Assuming that wireless growth has continued at the exact same rate in the 1Q of 2009 that it did in 2008, it would represent and additional 3.725 customers bringing the total US subscribers to 274,025,000.

This yields a 90.179% penetration rate for the “big four”.

[17] *See Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services*, *Thirteenth Report*, 23 FCC Rcd 2241 (2008) (“*Thirteenth Report*”).

[18] Department of Justice and Federal Trade Commission, *Merger Guidelines,* 1997, Section 1.5; *see also* Neil B. Cohen and Charles A. Sullivan, *The Herfindahl-Hirschman Index and the New Antitrust Merger Guidelines: Concentrating on Concentration*, 62 Tex. L. Rev. 453, 461 (1983).

[19] See *Thirteenth Report* at Table A-3.

[20] Although population numbers in an arbitrary region are not an exact match for population density, the EAs used in the *Thirteenth Report* center around metropolitan areas, and thus large areas are indeed generally also dense areas.

In an unobstructed and competitive market, the potential benefit of market growth in these EAs should be sufficient to encourage additional investment and new entrants.

More evidence that less populated areas rely heavily on fewer providers has been provided by the FCC and the Department of Justice, in the review of the Verizon-Alltell merger. The DOJ identified 100 local markets where the level of competition from carriers other than Verizon and Alltell was so small that the merger represented a significant harm to competition. The FCC identified an additional 5 markets. Thus, there are 105 geographic markets where Verizon faces little or no significant competition from other national carriers.[21]

MARKET PERFORMANCE

When compared to the international stage, United States consumers pay more for cellular phone service per year than most other developed nations.

In 2007 the average U.S. mobile phone subscriber paid $506 for service, much more than consumers in the U.K. ($374) or Spain ($293), and ranking America twenty second of the thirty countries studied by the international OECD.[22] While it is true that U.S. wireless carriers are able to provide lower costs per minute, this is because U.S. consumers are charged for the minutes to both send and receive calls, unlike consumers in many other countries who pay only for the minutes they use to make calls. As a result of this pay-to-send and pay-to-receive dynamic, carriers in the U.S. are able to extract some of the highest average returns per user (ARPU) by pricing consumers into tiered service plans and high monthly rates.[23]

PROVIDER CONDUCT IN PRICING

From the perspective of consumers, text messaging is one of many examples of wireless provider conduct that herds consumers toward contracts for bundled services with lock-in features that limit consumer choice. Significant consolidation and lack of effective federal oversight of the

---

[21] *See* Reply Comments of United States Cellular Corporation, Attachment, William P. Rogerson, *An Economic Analysis of Exclusivity Arrangements between the Big Four Wireless Carriers and Handset Manufacturers* at 3 n.5, Docket No. RM-11497 (February 23, 2009).

[22] *See* Organization for Economic Co-Operation and Development, *OECD Communications Outlook 2007*, 6 (2007). The OECD average is $439 per year.

[23] Frieden, Rob. "The Way Forward on Wireless." In *...And Communications For All* edited by Amit Schejter, 153-167. Lexington Books, 2009.

wireless industry have greatly diminished price competition in the wireless market. In addition to text messaging the four national wireless carriers – AT&T, Verizon, Sprint, and T-Mobile – have each raised prices on individual services. By pricing consumers into service tiers, providers are able to generate some of the highest average return per users by extracting higher rates for individual services than the market will bear.

Voice Plans

Monthly voice plan options provided by the four largest carriers do not reflect the variable lifestyles of the American consumer. Instead, these plans offer little flexibility and consumer choice. Most wireless providers' monthly plans offer a minimum of 200-450 minutes for $29.99-$39.99 per month, and offer a prepaid or "pay-as-you-go" service for customers who choose not to purchase a monthly plan. Pay-as-you go services range in cost from 10 cents to 20 cents per minute, depending on the provider – a high price even in comparison to international calling card rates. While carriers will claim that these plans comprise a broad range of options for the consumer, these limited choices effectively force the majority of consumers to pay more per month to purchase more minutes than they need, and reveal weak price rivalry.

Further, wireless providers have failed to take advantage of economies of scale despite a recent boom in the volume of mobile subscribers, demonstrating a classic example of market power and anticompetitive behavior. U.S. wireless subscribers have nearly tripled between 2000 and 2008, topping 270 million, or 87 percent of the population, in December of last year.[24] Wireless provider earnings reflect this massive subscriber growth. Annualized total wireless revenues for the industry amounted to over $148 billion in 2008, up from around $45 billion in 2000 and $19 billion in 1995.[25] Yet, pricing plans remain largely parallel, and monthly plan and pay-as-you-go options remain costly for customers looking for economical solutions.

Data Plans

---

[24] *See* CTIA, "Wireless Quick Facts: Year End Figures," *at* http://www.ctia.org/media/industry_info/index.cfm/AID/10323 .

[25] *See id.*

Thirty-five million Americans accessed the Internet with the handheld mobile devices in 2007 – that's a tenfold increase in penetration in less than two years.[26] As wireless data usage has increased in recent years, more wireless voice service providers have begun to offer data services alongside voice. But the prices charged for these services seem far removed from any possible cost, indicating supracompetitive profits and a stark absence of provider rivalry over data prices.

Usage charges over minimal initial allowances can easily bump a consumer's bill by several thousand dollars. AT&T's $65 per month plan, for instance, includes 5GB of data service, with an overage charge of $0.00048 for each additional *kilobyte*. This seems innocuous, but it would add up to a whopping $480 for every extra gigabyte (GB) of data transmitted (as a reference, a DVD-R can hold 4.7 GB).[27] Oklahoma wireless user Billie Parks, for instance, purchased a $99 "netbook" with $60 per month AT&T broadband service at Radio Shack. She received a bill for about $5,000, mostly comprised of charges for overstepping AT&T's 5GB data cap.[28] Consider Wayne Burdick, who decided to watch the Chicago Bears play the Detroit Lions over AT&T's wireless network. He was billed $27,000 for the privilege of watching the Bears win by four points.[29]

U.S. Lags Behind In Inexpensive Plans

Evidence indicates that most U.S. consumers end up adopting the offer of bundled services and commensurately high monthly rates. Our magazine *Consumer Reports* found that ninety four percent of our surveyed readers have the traditional cell phone plans of post-paid service.[30] Reports have also shown that the United States trails many other countries with regard to low-

[26] Peha, Jon. "A Spectrum Policy Agenda," In *...And Communications For All* edited by Amit Schejter, 137-153. Lexington Books, 2009.
[27] Data gathered from AT&T Wireless website at http://www.wireless.att.com/cell-phone-service/welcome/index.jsp. Reflects pricing for BlackBerry and PDA "Personal + tethering" data plan without an individual or FamilyTalk voice plan. International per-kilobyte data charges are much higher.
[28] Martin Perez, "AT&T, Radio Shack Sued For $5,000 Netbook Bill," *Information Week*, March 2, 2009, http://www.informationweek.com/news/telecom/business/showArticle.jhtml?articleID=215600328&subSection=News [accessed June 9, 2009].
[29] Weir, Bob. "Bears fan was billed $28K to watch game." USA Today, February 23, 2009. http://www.usatoday.com/topics/post/People/Athletes/Golf/Tiger+Woods/63261805.blog/1 [accessed June 15, 2009]
[30] "How to buy a pre-paid phone." *Consumer Reports*, January 2009.

cost prepaid services. Low income Americans do not have the inexpensive non-wireline options their counterparts in other countries have.[31]

This is largely because it does not pay for the average or low-income consumer to adopt pre-paid plans. Carriers offer subsidized cell phones when you sign up for a one or two year contract. Choosing to acquire a cell phone outside the carriers' subsidized channel of distribution offers no savings to consumers. Providers offer no lower rate to consumers that bring their own phone with them and represent no subsidy burden. Rob Friedan notes, "Whether by explicit agreement or 'consciously parallel' conduct all wireless carriers have agreed not to compete for the most price sensitive consumer who would gladly give up cutting edge technologies in exchange for lower monthly service rates."[32]

LIMITS ON CONSUMER CHOICE

Once consumers adopt a lengthy standard contract for bundled services, they face limited options and lock-in features, which present significant barriers for consumers to vote with their feet by changing providers.

Early termination fees

The biggest cost to switching providers is the ubiquitous early termination fees (ETFs). ETFs are penalties levied when a consumer wishes to change or cancel the terms of their wireless agreement. Early termination penalties by wireless carriers create artificial barriers to open competition in the wireless market and present difficult choices for the consumer. These penalties do not save consumers money as the carriers claim,[33] they rob consumers of the benefits that an open and competitive market would otherwise bring.

---

[31] Frieden, Rob. "The Way Forward on Wireless." In *...And Communications For All* edited by Amit Schejter, 153-167. Lexington Books, 2009.

[32] Friedan, Rob. Professor, Penn State University. "Hold The Phone: Assesing the Rights of Wireless Handset Owners and Carriers." Jan 7 2008.

[33] Evidence was presented at trial in California (Ayyad v. Sprint, CA Superior Court, Alameda County) that one carrier's early termination fee program actually cost them more money to implement than they recovered from it. In other words, this program does not save consumers money—it costs them extra. Further, according to internal memos, the company performed one calculation and one calculation only in determining the ETF: the effect on subscriber churn. That is, they did not examine whether they fully recovered "subsidies" they offered consumers; they simply said this will make it harder for consumers to switch. Clearly, this is about penalizing consumers for voting with their feet and pocketbooks, not about saving them money.

The wireless carriers say they want a national framework, but the truth is that they already have one. The Uniform Commercial Code (UCC) provides standards for "liquidated damages clauses" in contracts that are the same in all 50 states. However, what the industry seeks is nothing more than special treatment that would exempt it from the laws that all other businesses have to follow. Generally, liquidated damages clauses *can* be used to recover actual damages, but they *cannot* be used as arbitrary penalties designed to prevent consumers from switching companies.[34] But the early termination penalties the wireless industry is charging consumers are so far and above the value[35] of subsidies provided that something else is clearly going on.

The wireless industry is quick to note that they have other costs they recoup through the ETF, namely marketing and customer acquisition costs. But should consumers really have to pay for wireless companies' advertisements? Do we really believe it is fair or legal to force a customer who is going to another carrier to pay for the cost of finding another subscriber for her old carrier? The answer is clearly no.

Indicators like customer acquisition costs (CAC) are simply a measure of the efficiency of a carrier's marketing operation, and are NOT a measure of any value being given to the consumer. Consumers should not have to pay a penalty fee related to whether the company is running effective ads or not. If Congress is to take any action to constrain or condition ETFs, it must absolutely exclude advertising and marketing expenditures from the definition of a "reasonable" fee.

---

[34] Cal. Civ. Code, Sections 1671(d) and 1670.5.

[35] $14.33 is the average phone subsidy provided to the consumer according to the best data we have seen so far on carrier subsidies. In data submitted by the wireless carriers to the International Trade Commission, the average value of wireless handsets in 2006 was $115. The wireless industry's trade association (CTIA) says that the average price paid for phones in 2006 was $65.67, and the carriers also charge a $35 activation fee that they treated as handset revenues on their books—for a total of $100.67 paid by the average consumer for their handset. That leaves us $14.33 in average upfront savings. Do consumers pay that off in their first month of service? Their second? Surely it does not take two full years. If the carriers were to reduce their ETFs to $14.33—or even triple that amount—no one would be here today asking questions. But considering these penalties (at a minimum of $175 from the two largest carriers) are more than 12 times the benefit consumers are receiving, something else is going on.

Rather than facilitating the mobility and flexibility in the use of mobile devices, ETFs lock mobile customers into long-term contracts that fail to acknowledge the speed of technological progress in the mobile device market. While these pricing structures undoubtedly benefit the wireless carrier by providing a reliable customer base for the longer term, they fail to promote competition for lower prices and improved services. Indeed, ETFs facilitate oligopoly operating structures in the wireless market, since carriers are permitted to divide customers among themselves without the threat of suddenly losing them to a competing provider.

This issue has received significant attention on Capitol Hill. In 2007, U.S. Senators Amy Klobuchar (D-Minn.) and John D. Rockefeller (D-WV) introduced a bill, entitled the Cell Phone Consumer Empowerment Act, to address the anticompetitive nature of early termination penalties. This Act would have allowed consumers to exit their mobile contracts within 30 days of signing a new agreement with a new provider, without having to pay a penalty fee. The bill would have also required ETFs to be prorated in a way that reasonably links the fee with the actual economic damages accrued by a wireless provider.[36] Consumers Union strongly supports legislative efforts like these to reign in ETFs.

Contract extensions

Contract extensions further exacerbate the problem of early termination. When consumers choose to alter their voice and/or data plans or purchase a new mobile device due to certain lifestyle changes, many wireless carriers have required those consumers to extend the end-date of their contracts by one or two years.[37] At times, providers have enacted hidden or opaque contract extensions without warning the consumer. Sprint, for instance, has been the target of litigation for failing to notify customers that their contracts were being extended when they added more cell phone minutes or made other small changes to their plans.[38] It should be noted that the wireless carriers have begun to change this practice. In our annual survey, *Consumer Reports* shows that consumers were less likely to list mandatory contract extensions as a top

[36] S. 2033, 110th Congress http://www.thomas.gov/cgi-bin/bdquery/z?d110:SN02033:@@@D&summ2=m& . The Senate held hearings on the legislation, but it ultimately died in committee.
[37] Though the FCC's *Thirteenth Annual Report and Analysis of Competitive Market Conditions* notes that this is not a universal practice. [para 185].
[38] Brian Bakst, "Minnesota Says Sprint Duped Customers," *Associated Press*, September 27, 2007, http://www.wirelessforums.org/alt-cellular-sprintpcs/sprint-sued-unapproved-contract-extensions-29588.html [accessed June 9, 2009].

complaint.[39] Still, mandatory contract extensions, hidden or not, are unjustified business practices established to worsen the anticompetitive nature of ETFs and should be guarded against.

Handset exclusivity

Handset exclusivity arrangements – contracts between device manufacturers and wireless service providers to limit devices to be offered with only one wireless service – artificially limit consumer choice, restrict device innovation, and lead to higher prices. Of the ten most popular handsets in the market in 2008, eight were shackled to various network providers under exclusive deals.[40] The result, for the consumer, is an artificial restriction on choice of service provider and on switching service providers.[41] In addition to limitations on the consumer's choice of service provider, the consumer faces artificial limitations on choice of device, because exclusivity arrangements are also a barrier to entry for new entrants in the market for wireless devices.[42]

Exclusivity arrangements impact not only consumer choice, but also market structure, as they constitute a barrier to entry for small service providers. As a direct consequence of exclusive deals between device manufactures and incumbent national service providers, small service providers cannot offer the use of popular handsets and smartphones over their networks. Thus, their services are less attractive to consumers who are driven towards the popular devices that are offered by the incumbent providers, leading to further increase in their market power. These arrangements are of particular concern with respect to the future of wireless services. The future of wireless services, and wireless Internet access services in particular, is tied to the use of smart phones, and without the ability to offer them, rural providers will not have the ability to generate

[39] *Consumer Reports*, Jan 2009

[40] RCR Wireless, "By the Numbers: Top Ten Most Popular U.S Handsets in November," Kristen Beckman, [January 8, 2009], http://www.rcrwireless.com/article/20090108/wireless/901079989/1081/newsletter33 [accessed: June 8, 2009].

[41] In contrast, almost 70–80% of the phones in Europe and Asia are sold independent of the wireless providers. Articlesbase, "Cheap Unlocked Cell Phones: Switch Cell Phone Providers Without Losing Your Phone," Margarita Schwartzman, [June 5, 2008], http://www.articlesbase.com/cell-phones-articles/cheap-unlocked-cell-phones-switch-cell-phone-providers-without-losing-your-phone-439210.html [accessed: June 8, 2009].

[42] For example, as Dell was considering developing a smartphone, it was faced with significant challenges, including the need to carve out an exclusivity arrangement with a carrier, to market its smartphone. The Wall Street Journal, "Dell Prepares to Dial Into Smartphone Marketplace," [January 30, 2009], http://online.wsj.com/article/SB123327385680231133.html [accessed: June 8, 2009].

enough revenues to deploy 3G networks.[43] If no action is taken, a similar anti-competitive environment will ensue for the coming 4G network markets.

Additionally, handset exclusivity arrangements give wireless service providers leverage to exert influence over handset innovations that do not meet their approval. Currently, a handset manufacturer is at the whim of the network carrier (with whom the exclusivity contract is drawn) when it introduces any new features to market its handset. For example, Nokia was forced to remove some of its features, like Wi-Fi, for the ability to market its e61 phone in the U.S. Nokia was required to eliminate these features because AT&T, the network provider, was apprehensive that consumers would take advantage of VOIP services, thereby reducing the minutes of its wireless phone services.[44] In another example, RIM (the manufacturer of Blackberry) was prohibited by AT&T from offering free mapping services to Blackberry users since AT&T wanted to offer consumers its own mapping services and charge for it.[45]

Finally, exclusive deals are not required by the structure of the wireless market – they serve as purely artificial impediments to competition and innovation. Handset exclusives are one of many ways to finance research and development. Exclusives are a question of financing. They are not necessary to innovation where demand exists. Indeed, parallels can be drawn with several other markets where handset exclusives are not needed to encourage and enhance innovation. The iBook does not need to be shackled to Comcast, Dell's laptops do not need to be exclusively available through Time Warner in order to produce innovation in the computing world. In many markets, innovation has flourished *because* the device and the network are separate. The wireless market in the U.S. is a well established market for manufacturer devices. Device manufacturers should not have to rely on exclusive arrangements with service providers to market their devices and to ensure sufficient revenues to fund the research and development of new products and services. Indeed, this is the case in other established markets, such as Asia and

[43] William Rogerson, "An Economic Analysis of Exclusivity Arrangements between the Big Four Wireless Carriers and Handset Manufacturers," Comments of United States Cellular Corporation, FCC Docket No. RM-11497 [February 23, 2009].
[44] Tim Wu, "Wireless Carterphone," International Journal of Communication 1, 2007, http://ssrn.com/abstract=96202 [accessed: June 8, 2009].
[45] The Wall Street Journal, "A Fight Over What you Can Do on a Cellphone," Jessica Vascellaro, [June 14, 2007], http://discussion.treocentral.com/cdma-north-america/140971-please-help-us-yourself-get-better-phones.html [accessed: June 8, 2009].

Europe. Handset manufacturers in Asia and Europe are able to sell 70-80% of the phones independent of exclusive deals with service providers.[46] Rather than representing an essential feature of the market, handset exclusivity deals are an artificial impediment to competition in the wireless market.

PROVIDER CONDUCT IN NON-PRICING MARKET FEATURES

While there are some markers that represent positive developments – for example we see consumer satisfaction with cellular phone services increasing[47] and consumers are increasingly relying on their mobile devices for various functions and uses – the current market structure blunts the force of consumer demand, blocks consumer access to devices, and inhibits innovation with regard to cell phones and software.

In an efficient market, consumers would be able to acquire the full use and functionality they value from devices and services. However, because the mobile device and software marketplaces are dependant on wireless spectrum to ensure their products reach consumers, they therefore are dependant on the big four national wireless carriers. Unfortunately, these carriers exert their influence by, "aggressively controlling product design and innovation in the equipment and application markets."[48] As a result, we have seen handset manufacturers impose substantial limitations on the applications that could be available on mobile phones.

For example, cell phone developers have reported carriers forcing the elimination of call timer applications, which keep track of individual calls and weekly, monthly or yearly call totals to help the consumer avoid overage charges. Fearful of independent records of consumers calling habits, wireless providers limit or prohibit this useful consumer function.[49]

When camera phones were introduced to the market, the possibility of emailing photos instantly to a friend or family member became coveted by consumers. However, in the early stages of

---

[46] Cnet News, "Will unlocked cell phones free consumers," Marguerite Reardon, [January 24, 2007], http://news.cnet.com/Will-unlocked-cell-phones-free-consumers/2100-1039_3-6152735.html [accessed: June 5, 2009].

[47] *Consumer Reports*, Jan 2009

[48] Wu, Tim. *Wireless Carterphone*. International Journal of Communication 389, 399 (2007), available at http://ssrn.com/abstract=962027.

[49] *Id.*

camera phones, device developers sought to create an function to email pictures through the phone – but, carriers shut them down, in order to funnel consumers towards a carrier-controlled, paid "photo sharing" website where consumers were forced to pay to upload a photo that they can then later download on their PC and send via email.[50]

We are particularly concerned about carrier and manufacturer attempts to limit the full force of the Internet from reaching mobile consumers. For example, the popular Skype VoIP program has been blocked by Apple from operating over AT&T's 3G network – a situation which AT&T lobbyist Jim Cicconi explained by saying, "We absolutely expect our vendors not to facilitate the services of our competitors."[51] The same treatment is given to Sling Media's SlingPlayer Mobile application, forbidding its operation over the 3G network, defending the decision solely by pointing to language in the terms of service.[52] This type of application blocking prevent the full migration of Internet services to the mobile marketplace, and allows carriers to market the Internet, while only offering the services that can be monetized. AT&T is not alone – many wireless providers have substantial limitations in the terms of service for their mobile "broadband" services.

Free speech implications have also been raised as a result of the consolidated power of wireless providers over mobile communications services. Working with carriers, several organizations have been provided SMS "short codes", which allows them to reach multiple mobile subscribers with one text message. In September 2007, Verizon Wireless refused to provision a short code to NARAL pro-choice America for NARAL's completely opt-in political alert service. Despite having allowed similar short codes for other campaigns, Verizon wrote to NARAL that it reserves the right to refuse service to, "any organization that seeks to promote an agenda or distribute content that, in its discretion, may be seen as controversial or unsavory to any of its users."[53] Although Verizon backed down and agreed to provision a short code to NARAL shortly afterwards, it preserves it's right to deny texting capability to anyone that does not share

---

[50] *Id.*

[51] USA Today, "Skype's iPhone limits irk some consumer advocates," Leslie Cauley, [February 2, 2009], http://www.usatoday.com/tech/news/2009-04-01-att-skype-iphone_N.htm [accessed: June 8, 2009].

[52] *See* Chris Riley, "AT&T's Not-So-Secret Veto over 3G SlingPlayer Mobile," *SavetheInternet.com Blog* (May 13, 2009), *at* http://www.savetheinternet.com/blog/09/05/13/att's-not-so-secret-veto-over-3g-slingplayer-mobile.

[53] Liptak, Adam. "Verizon Blocks Messages of Abortion Rights Group," *The New York Times*. 27 Sept 2007. http://www.nytimes.com/2007/09/27/us/27verizon.html [accessed June 15, 2009].

its "corporate values". The incident and reaction led to several public interest groups filing a petition for declaratory ruling, which has been before the FCC for the past 18 months.[54]

Given the degree of similarity in the usage limitations, and the absence of any major wireless carrier willing to offer a true mobile broadband or texting service without limitations, providers are not engaging in aggressive competition over non-price service features.

SOLUTIONS AND GOVERNMENT OVERSIGHT

We believe more oversight is needed in the consolidating wireless marketplace. This hearing and others like it is a good start. However, formal inquiries and investigations should continue to determine whether government intervention is necessary. This is an important pocket book issue for millions of Americans in tough economic times.

For example, the Government Accountability Office should study the practical impediments to consumers that attempt to switch carriers and determine what impact they have on consumer choice and on effective competition. The FCC should fix the in-market exception for voice roaming and enter into a rulemaking on data roaming and handset exclusivity to lower barriers to competition.[55]

Finally, any additional proposed mergers in the wireless market place should receive strong scrutiny by the FCC and the DOJ.

CONCLUSION

Effective or meaningful competition occurs when 1) the barriers to entry for new competitors in the market are low; 2) consumers have a choice of alternative providers and services in the market and the costs of switching providers do not present an undue burden; 3) innovations in technology are encouraged and lead to expansion of services and product offerings for the

---

[54] See Public Knowledge, et al. Petition for Declaratory Ruling, WT Docket No. 08-7, (Dec. 11, 2007). Available at http://www.publicknowledge.org/pdf/text-message-petition-20071211.pdf.

[55] Voice roaming, special access fees to the Internet, spectrum holdings and other systemic barriers to competition in the market are detailed in our attached FCC filing.

consumers; and 4) no single firm or a group of firms have the power to influence the prices of the products and services.

However, currently there are pronounced and extensive barriers to effective competition. Consumers are being locked-in to the few large market firms and competitors are being locked-out of the marketplace through limited access to spectrum; unreasonable prices, terms, and conditions for access to the on-roads of the Internet and for data roaming; unreasonable in-market exceptions for voice roaming. This lack of effective competition has led to provider conduct, such as pricing consumers into two year contracts with lock-in features, handset exclusivity and parallel pricing regimes, which harms consumers and inhibits innovation.

ADDENDUM

COMMENTS OF CONSUMER FEDERATION OF AMERICA, CONSUMERS UNION, FREE PRESS, MEDIA ACCESS PROJECT, NEW AMERICA FOUNDATION AND PUBLIC KNOWLEDGE

ON

FCC CMRS COMPETITION REPORT

Before the
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, DC 20554

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

COMMENTS OF
CONSUMER FEDERATION OF AMERICA, CONSUMERS UNION,
FREE PRESS, MEDIA ACCESS PROJECT, NEW AMERICA FOUNDATION,
AND PUBLIC KNOWLEDGE

Mark Cooper
Consumer Federation of America

Parul P. Desai
Andrew Jay Schwartzman
Media Access Project

Joel Kelsey
Consumers Union

Michael Calabrese
New America Foundation

Ben Scott
Free Press

Harold Feld
Gigi Sohn
Public Knowledge

June 15, 2009

SUMMARY

A proper analysis of the CMRS market in the United States will indicate that the market demonstrates an absence of effective competition; is likely to become less competitive; and produces active and ongoing consumer harms as a result of insufficient competition – harms that can be remedied, at least in part, through Commission action to promote competition. The Commission should evaluate competition in its upcoming *Fourteenth Report* through the framework of market structure, provider conduct, consumer behavior (or consumer choice), and market performance – but the Commission should consider a broader range of factors in each aspect of this framework, reflecting long accepted economic literature.

The Commission should interpret the concept of "effective competition" through the lens of the user at every opportunity, and should examine all obstacles to consumer choice and innovation, the removal of which ought to be the ultimate end goals of promoting competition. Following such an examination, the Commission cannot but find that the current market structure has resulted in fewer choices for consumers in pricing models, services, applications, and devices. Ongoing restrictions to competition have also limited innovation, particularly in the ancillary device market, and have discouraged investment to improve the quality of wireless networks. The Commission must recognize and address the failures of the current CMRS market by intervening to limit barriers to entry, consumer choice, and innovation.

TABLE OF CONTENTS

I. INTRODUCTION 1
II. THE CMRS MARKET IS NOT COMPETITIVE........ 3
A. Structural Competition in the *Thirteenth Report* is Not Sufficient........ 3
B. A Better Definition of Market Structure Would Reveal Even Less Competition. 4
C. Provider Conduct in Pricing Indicates an Absence of Effective Competition........ 6
D. Provider Conduct in Non-Pricing Aspects Also Reflects Insufficient Competition........ 10
E. Limits On Consumer Choice Reflect Insufficient Competition. 12
F. Market Performance Would Reflect Insufficient Competition........ 16
G. Considering More Fine-Grained Factors Would Reflect Insufficient Competition. 17
III. THE CMRS MARKET RESTRICTS ENTRY AND GROWTH. 18
A. Spectrum Reform Is a Critical Requirement For a Vibrant Wireless Market........ 19
B. Special Access Reform Is Essential. 21
C. Consolidation Has Harmed Growth and Access for New Entrants. 23
D. Loopholes In Roaming Regulations Limit New Entrants And Growth. 25
IV. CONCLUSION........ 27

Before the
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, DC 20554

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

COMMENTS OF
CONSUMER FEDERATION OF AMERICA, CONSUMERS UNION,
FREE PRESS, MEDIA ACCESS PROJECT, NEW AMERICA FOUNDATION,
AND PUBLIC KNOWLEDGE

The Consumer Federation of America, Consumers Union, Free Press, Media Access Project, the New America Foundation, and Public Knowledge ("Commenters") respectfully submit these comments in response to the *Public Notice* of the Federal Communications Commission ("Commission") seeking input on the state of competition in the Commercial Mobile Radio Service ("CMRS") market for the Commission's upcoming *Fourteenth Report*.

I. INTRODUCTION

The wireless industry has continued to grow over the years, with mobile phones becoming a pervasive presence in the lives of Americans. It is estimated that more than 270 million mobile phones are in use in the U.S.[1] Consumers use their mobile devices more and more – for mobile voice, data, and Internet access. Mobile broadband is expected to ultimately

---

[1] *See* Testimony of Chris Murray, Senior Counsel, Consumers Union regarding "Competition in the Wireless Industry" before the U.S. House of Representatives Subcommittee on Communications, Technology, and the Internet, Committee on Energy and Commerce, 2 (May 7, 2008).

reach 30-35% of the total user base.[2] Wireless services have undoubtedly grown – but growth should not be mistook for effective competition. In fact, while the mobile market continues to grow, it continues to grow less and less competitive, because the current wireless market and regulatory structures inhibit competition, consumer choice, and innovation.

The Commission's *Thirteenth Report* evaluated only a narrow range of the factors required for a proper determination of effective competition. Based on a shallow analysis of a limited subset of market factors, examining a too-broadly defined market, and ignoring the majority of practical impediments to competition and the clearest signs of market problems, the *Thirteenth Report* concluded that the CMRS market was competitive. A more thorough analysis using the criteria and the data from the *Thirteenth Report* would reveal the severe problems with competition in the wireless market. An accurate analysis – incorporating a proper determination of the relevant market, a focus on the consumer and limits to consumer choice, and consideration of the fine-grained factors used in industrial economics to evaluate workable competition in markets – would present an even more dire, and even more accurate picture.

There is little reason to believe the current market and regulatory structure will support or promote more competition in the future. Effective competition in the wireless market requires, among other things, minimal barriers to entry and growth for competitors, maximal consumer choice, and an absence of explicit barriers to innovation – all features not present in the wireless market. There are pronounced and extensive barriers to effective competition in the modern CMRS market, including limited access to spectrum; unreasonable prices, terms, and conditions for special access; and horizontal concentration in both the wireless and wireline markets. This lack of effective competition has led to provider conduct including handset exclusivity

[2] *See* McKinsey & Company, *Perspectives on the Evolution of the U.S. Wireless Industry* 15 (2009).

arrangements and parallel pricing regimes that harm consumers, inhibit innovation, and further limit competition. The Commission must acknowledge the failures of the current regulatory structure to bring about meaningful competition, and should take the necessary actions to revive and expand competition going forward.

II. THE CMRS MARKET IS NOT COMPETITIVE.

A. Structural Competition in the *Thirteenth Report* is Not Sufficient.

Contrary to the conclusions of the *Thirteenth Report*, a weighted national average HHI of 2674 is not a high level of competition. Under general antitrust analysis, HHI levels above 1800 are considered "highly concentrated."[3] Commenters expect the national average HHI to be even higher for the 2008 data to be used in the *Fourteenth Report* – the introduction of the 3G iPhone and the importance of mobile broadband as a growth driver, particularly in a weak economy, will likely result in large carriers with popular devices attracting a disproportionate share of new and switching customers. But even if HHI levels have not increased, any HHI level above 1800 in any individual economic area ("EA") indicates severely limited competition under traditional analyses. Of the 171 EAs reported in the *Thirteenth Report*, exactly one had an HHI under 1800 – and barely, at 1795.[4] Colloquially, if "four is few" and "six is many," the gold standard for "many competitors" is 6 equal-sized competitors, or an HHI of 1667 – which no EA comes near.

---

[3] Department of Justice and Federal Trade Commission, *Merger Guidelines,* 1997, Section 1.5; *see also* Neil B. Cohen and Charles A. Sullivan, *The Herfindahl-Hirschman Index and the New Antitrust Merger Guidelines: Concentrating on Concentration*, 62 Tex. L. Rev. 453, 461 (1983).

[4] *See Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services*, *Thirteenth Report*, 23 FCC Rcd 2241 at Table A-3 (2008) ("*Thirteenth Report*").

A deeper examination of the EA data in the *Thirteenth Report* paints a bleaker position than even the high average HHI of 2674 indicates. Economies of scale should indicate a pattern across the EAs under which urban areas have more competitors and lower HHI than rural areas because competitors have more to gain from competing aggressively in those markets – but instead, according to 2007 data, both the most and least competitive regions are the most rural, demonstrating distortions compared to what would be expected from a competitive environment.[5] Furthermore, many EAs demonstrate substantially higher than average HHIs, ranging from the 4000s into the low 6000s, and in an unobstructed, competitive market, the potential benefit of market growth in these areas at least (if not others) would be sufficient to encourage additional investment and new entrants.

B. A Better Definition of the Market Would Reveal Even Less Competition.

Although the *Thirteenth Report* properly separated mobile services from other non-substitutable services, such as Wireless Local Area Network services, the *Report* nevertheless found it reasonable to analyze mobile voice and mobile broadband together, based in part because these services are often advertised and bundled together.[6] The *Report* also explains the joint analysis, in part, on the lack of better data.[7] But, combining these markets obscures competitive problems arising from greater concentration in mobile broadband services than

---

[5] Although population numbers in an arbitrary region are not an exact match for population density, the EAs used in the *Thirteenth Report* center around metropolitan areas, and thus large areas are indeed generally also dense areas.

[6] *See Thirteenth Report* at paras. 7, 34.

[7] *See id.* at para. 33 ("However, the numbering data provide an estimate of mobile telephone subscribers in general, without regard to whether subscribers use mobile broadband and other data services as well as mobile voice services. As a result, the data do not provide a way of distinguishing mobile telephone subscribers who still use their handsets primarily or exclusively for voice calls from those who also subscribe to, and actively use, mobile data services, or the smaller subset of subscribers who have already migrated to mobile broadband networks and devices.").

mobile voice services. Mobile broadband services, and the advanced wireless handsets capable of using them to full extent, are disproportionately available to large incumbent carriers, because of the market "features" of handset exclusivity arrangements for smart phones, excessive backhaul rates for broadband traffic, disproportionate holdings of spectrum efficient for mobile broadband usage, and other impediments to mobile broadband service offerings by competitors.[8] Furthermore, growth in the wireless market as a whole is driven by growth in mobile broadband services, particularly in a rough economy.[9] Therefore, any limits on competition in the mobile broadband market are particularly significant, and have ancillary impact on the ability of providers to compete in the mobile voice market. The Commission must therefore analyze mobile broadband data separately in the *Fourteenth Report*.

In the *Thirteenth Report* and past reports, the Commission's primary consideration for determining whether to treat two products as being in the same market is ostensibly consumer-focused – whether consumers view the products to be substitutes.[10] From the perspective of the consumer, mobile data services that do not allow the consumer to connect to the Internet – such as Verizon's V Cast Mobile TV service – do not serve as substitutes for true mobile Internet access services.[11] In the *Thirteenth Report*, the Commission treated the growth in mobile

---

[8] *See infra* Sections II(E)(3) and III.

[9] Om Malik, "Downturn or Not, Mobile Broadband is Growing Fast," *GigaOm* (March 17, 2009), *at* http://gigaom.com/2009/03/17/downturn-or-not-mobile-broadband-is-growing-fast/. *See also* AT&T, "AT&T Investor Update," at p. 7, April 22, 2009, *at* http://www.att.com/Investor/ Financial/Earning_Info/docs/1Q_09_slide_c.pdf.

[10] *See Thirteenth Report* at para. 32.

[11] The Commission recognized this in their proceeding on broadband data collection. "When counting such subscribers, we direct providers to exclude subscribers whose choice of content is restricted to only customized-for-mobile content,86and to exclude subscribers whose subscription does not include, either in a bundle or as a feature added to a voice subscription, a data plan providing the ability to transfer, on a monthly basis, either a specified or an unlimited amount of data to and from Internet sites of the subscriber's choice." *Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced*

Internet access services and in other, non-Internet, mobile data services to be an indicator of growth in the broader wireless market[12] – a true statement, but one with little bearing on the current state or future of competition in the separate markets for mobile voice services, mobile data services, and mobile Internet access services. We urge the Commission to treat these services more distinctly in the *Fourteenth Report*. A deeper evaluation of these services will indicate a higher degree of concentration and more obstacles to competition among providers of mobile data and mobile Internet access services as compared to mobile voice services.

C. Provider Conduct in Pricing Indicates an Absence of Effective Competition.

The *Thirteenth Report* evaluated provider conduct primarily through traditional metrics such as price rivalry, capital expenditures, advertising expenditures, and investment.[13] By examining price and non-price rivalry at only the most general levels, and often in language more reminiscent of advertising literature than critical analysis, the *Thirteenth Report* failed to identify any specific instances of provider conduct reflecting insufficient competition. Commenters urge the Commission to take a more detailed look at provider conduct in the *Fourteenth Report*.

Significant consolidation and lack of effective federal oversight of the wireless industry have greatly diminished price competition in the CMRS market. In a variety of ways, the four national wireless carriers – AT&T, Verizon, Sprint, and T-Mobile – have priced their services in parallel, potentially generating a substantial increase in prices. U.S. consumers paid an average of $506 per year for wireless service in 2007, much more than users in most other developed

---

Services to All Americans, Improvement of Wireless Broadband Subscribership Data, and Development of Data on Interconnected Voice over Internet Protocol (VoIP) Subscribership, WC Docket No. 07-38, Notice of Proposed Rulemaking, 22 FCC Rcd 7760, 7772 at para. 23 (2008).

[12] *See Thirteenth Report* at paras. 164-167.

[13] *See id.* at paras. 110-176.

nations.[14] In particular, substantially parallel (and substantially above-cost) text message prices and mobile broadband usage prices reflect a stark failure of competition over price in wireless services.

1. Voice Plans

Monthly voice plan options provided by the four largest carriers do not reflect the variable lifestyles of the American consumer. Instead, these plans offer little flexibility and consumer choice. Most CMRS providers' monthly plans offer a minimum of 200-450 minutes for $29.99-$39.99 per month, and offer a prepaid or "pay-as-you-go" service for customers who choose not to purchase a monthly plan. Pay-as-you go services range in cost from 10 cents to 20 cents per minute, depending on the provider – a high price even in comparison to international calling card rates. While carriers will claim that these plans comprise a broad range of options for the consumer, these limited choices effectively force the majority of consumers to pay more per month to purchase more minutes than they need, and reveal weak price rivalry.

Further, CMRS providers have failed to take advantage of economies of scale despite a recent boom in the volume of mobile subscribers, demonstrating a classic example of market power and anticompetitive behavior. U.S. wireless subscribers have nearly tripled between 2000 and 2008, topping 270 million, or 87 percent of the population, in December of last year.[15] Wireless provider earnings reflect this massive subscriber growth. Annualized total wireless revenues for the CMRS industry amounted to over $148 billion in 2008, up from around $45

---

[14] *See* Organization for Economic Co-Operation and Development, *OECD Communications Outlook 2007*, 6 (2007). The OECD average is $439 per year.

[15] U.S. cell phone subscribers amounted to about 207 million in 2005, about 109 million in 2000, and about 33 million in 1995. *See* CTIA, "Wireless Quick Facts: Year End Figures," *at* http://www.ctia.org/media/industry_info/index.cfm/AID/10323.

billion in 2000 and $19 billion in 1995.[16] Yet, pricing plans remain largely parallel, and monthly plan and pay-as-you-go options remain costly for customers looking for economical solutions.

2. Data plans

As wireless data usage has increased in recent years, more wireless voice service providers have begun to offer data services alongside voice service. But the prices charged for these services seem far removed from any possible cost, indicating supracompetitive profits and a stark absence of provider rivalry over data prices. Usage charges over minimal initial allowances can easily bump a consumer's bill by several thousand dollars. AT&T's $65 per month plan, for instance, includes 5GB of data service, with an overage charge of $0.00048 for each additional *kilobyte*, adding up to a whopping $480 for every extra gigabyte of data transmitted.[17] Oklahoma wireless user Billie Parks, for instance, received a bill for about $5,000, mostly comprised of charges for overstepping AT&T's 5GB data cap.[18]

3. SMS fees

CMRS carriers have adopted parallel, and increasing, pricing structures to maintain high text messaging, or SMS, rates. Since 2005, rates to send and receive individual text messages on the networks of all four major carrier networks have simultaneously doubled from 10 cents to 20 cents per message.[19] In 2003, T-Mobile charged as little as 5 cents per message to customers

---

[16] *See id.*

[17] *See generally* "Cell Phones and Cell Phone Plans," AT&T Wireless, *at* http://www.wireless.att.com/cell-phone-service/welcome/index.jsp. These rates reflect pricing for BlackBerry and PDA "Personal + tethering" data plan without an individual or FamilyTalk voice plan. International per-kilobyte data charges are much higher.

[18] *See* Martin Perez, "AT&T, Radio Shack Sued For $5,000 Netbook Bill," *Information Week* (March 2, 2009), *at* http://www.informationweek.com/news/telecom/business/showArticle.jhtml?articleID=215600328&subSection=News.

[19] *See* Marguerite Reardon, "The Rising Cost of Texting," *CNet News* (July 1, 2008), *at* http://news.cnet.com/8301-10784_3-9982251-7.html.

who did not sign up for a monthly text messaging plan.[20] When questioned about the apparent abuses of market power,[21] the providers noted their monthly SMS plans, which can charge users as little as 1 cent for a single message, or provide unlimited messaging for a flat fee. However, the carriers neglected to explain why the price of *individual* text messages, for customers who choose not to buy a monthly plan, have increased. They failed to also address why all four companies raised the prices for individual messages by equal amounts at largely identical times. In other words, they failed to acknowledge concerns about the potentially anticompetitive nature of their pricing practices for individual SMS messages.[22]

Price increases for text message services reflect a failure of competition, because they do not align with increasing costs but only increasing profits. The cost a carrier incurs by transmitting an SMS message has not increased in recent years. Text messaging files are very small, and the price of their transmission is negligible for the provider. An SMS message travels as a wireless signal from the handset, through the wired telephone network, and as a wireless signal to the receiving handset. The text message is a free rider inside a so-called "control channel," or space that is already being used to operate the wireless network. In other words, a text message does not use up any extra spectrum once the carrier pays the cost of the underlying infrastructure and storage equipment. Thus, any revenue received by the provider on

---

[20] *See* Kristin Dizon, "Text Messaging Makes Cell Phones Even Hotter Among Kids," *Seattle Post-Intelligencer* (September 30, 2003), http://www.seattlepi.com/lifestyle/141809_texting30.html.

[21] *See* Letter from Senator Herb Kohl, Chairman of Subcommittee on Antitrust, Competition Policy, and Consumer Rights, to Verizon Wireless, AT&T, Sprint, and T-Mobile (Sept. 9, 2008), *available at* http://kohl.senate.gov/LT%20-%20cell%20ph%20CV.pdf.

[22] *See generally* Letter from AT&T to Herb Kohl, Chairman of Subcommittee on Antitrust, Competition Policy, and Consumer Rights ("Chairman Kohl") (October 6, 2008); Letter from Sprint to Chairman Kohl (October 6, 2008); Letter from T-Mobile to Chairman Kohl (October 3, 2008).

incremental text message usage is nearly pure profit.[23] To put these profits in perspective: considering how little data is transferred in an SMS message, at 20 cents per message, consumers pay the equivalent of almost $1,500 per megabyte of data transferred, a rate over seventeen times more expensive than receiving data from the Hubble Space Telescope.[24] Streaming a single typical song at SMS data rates would cost a consumer more than $5,000.[25] The failure to compete by maintaining or lowering text message prices to reflect cost therefore should be considered by the Commission in the *Fourteenth Report*'s evaluation of provider conduct.

D. Provider Conduct in Non-Pricing Aspects Also Reflects Insufficient Competition.

The *Thirteenth Report* spent considerable time discussing new "app stores" and similar new functionality offered by carriers, and pointed to these features as indicative of provider competition. The Commission is right to consider innovation as a sign of market competition. However, in 2008, the continued evolution of these offerings reflect substantial limitations on innovation and on competition, demonstrated by ongoing limitations imposed by the wireless carriers on the development of applications for wireless devices and wireless Internet access services – limitations that are undesired by users of the networks, reflecting insufficient competition and high switching costs, and limitations that serve no clear purpose other than to limit competition even further.

In an efficient market, consumers would be able to acquire the full use and functionality they value from their services. But mobile Internet access service providers continue to impose

---

[23] *See* Randall Stross, *What Carriers Aren't Eager to Tell You About Texting*, The NEW YORK TIMES (December 28, 2008).
[24] *See* Gabriel Gache, "Space Science Data Transmission Four Times Cheaper than SMS," *Softpedia* (May 12, 2008), *at* http://news.softpedia.com/news/Space-Science-Data-Transmission-Four-Times-Cheaper-than-SMS-85381.shtml (identifying that at 5 cents per message, SMS data transfers are 4.4 times more expensive than data transfer to and from the Hubble telescope).
[25] Assuming an MP3 file size of 3.5 MB, typical for a 3.5 minute song.

substantial limitations on the applications available through the store and the uses of the Internet access service. For example, the popular Skype VoIP program is not permitted to operate over AT&T's 3G network – a situation which AT&T lobbyist Jim Cicconi explained by saying "We absolutely expect our vendors not to facilitate the services of our competitors."[26] AT&T gave the same treatment to Sling Media's SlingPlayer Mobile application, forbidding its operation over the 3G network, defending the decision solely by pointing to language in the terms of service.[27] Finally and most recently, the debut of Apple's iPhone 3G-S was awaited anxiously by fans, who were subsequently disappointed to learn that AT&T did not permit the operation of several of its features.[28]

But AT&T is not alone – all four major nationwide wireless carriers have substantial limitations in the terms of service for their mobile broadband services. Given the degree of similarity in the usage limitations, and the absence of any major wireless carrier willing to offer a mobile broadband service without limitations (despite the insistence of some that the network would support all uses), providers are certainly not engaging in aggressive competition over non-price service features.

In the *Fourteenth Report*, the Commission should consider limitations on usage as provider conduct indicating a lack of effective competition. These limitations on usage should especially be considered where they are adopted in parallel and ostensibly without a basis in limitations in the network.

---

[26] *See* Leslie Cauley, "Skype's iPhone limits irk some consumer advocates," *USA Today* (February 2, 2009), *at* http://www.usatoday.com/tech/news/2009-04-01-att-skype-iphone_N.htm.
[27] *See* Chris Riley, "AT&T's Not-So-Secret Veto over 3G SlingPlayer Mobile," *SavetheInternet.com Blog* (May 13, 2009), *at* http://www.savetheinternet.com/blog/09/05/13/att's-not-so-secret-veto-over-3g-slingplayer-mobile.
[28] *See* Kevin Kelleher, "Why Does my iPhone Suck?" *Reuters* (June 12, 2009), *available at* http://www.reuters.com/article/bigMoney/idUS337036694420090612.

E. Limits On Consumer Choice Reflect Insufficient Competition.

Thanks to lengthy standard contracts, high early termination fees ("ETFs"), and complete barriers to consumer choice of wireless devices, consumers face substantial obstacles in choosing and switching providers. In the *Thirteenth Report*, in its section on "consumer behavior," the Commission essentially ignored these obstacles, and spent a scant ten paragraphs on all of the barriers to user switching of service providers.[29] The benefits of local number portability for switching were praised for three full paragraphs, but only one was spent on ETFs, and the Commission discussed the benefits of long-term contracts and minimized the consumer harm of the practice.[30] Handset exclusivity and other practical obstacles to switching went unmentioned. In the *Fourteenth Report*, the Commission must take more seriously these practical impediments to consumer switching, to determine the impact that they have on consumer choice and on effective competition.

1. Early termination fees

Early termination fees are penalties levied when a consumer wishes to change or cancel the terms of their wireless agreement. Early termination penalties by CMRS carriers create artificial barriers to open competition in the wireless market and present difficult choices for the consumer. Rather than facilitating the mobility and flexibility that most consumers rightfully expect from the use of mobile devices, ETFs lock mobile customers into long-term contracts that fail to acknowledge the speed of technological progress in the mobile device market. While these pricing structures undoubtedly benefit the wireless carrier by providing a reliable customer base for the longer term, they fail to promote competition for lower prices and improved services. Indeed, ETFs facilitate oligopoly operating structures in the wireless market, since

---

[29] *Thirteenth Report* at paras. 177-186.
[30] *Id*. at 185.

carriers are permitted to divide customers among themselves without the threat of suddenly losing them to a competing CMRS provider.

2. Contract extensions

Contract extensions further exacerbate the problem of early termination. When consumers choose to alter their voice and/or data plans or purchase a new mobile device due to certain lifestyle changes, many CMRS carriers require those consumers to extend the end-date of their contracts by one or two years.[31] At times, providers have enacted hidden or opaque contract extensions without warning the consumer.[32] Sprint, for instance, has been the target of litigation for failing to notify customers that their contracts were being extended when they added more cell phone minutes or made other small changes to their plans.[33]

Contract extensions, hidden or not, are unjustified business practices established to worsen the anticompetitive nature of ETFs. Moreover, contract extinctions further legitimate the use of early termination penalties, and force customers to stay with one provider.

3. Handset exclusivity

Handset exclusivity arrangements – contracts between device manufacturers and wireless service providers to limit devices to be offered with only one wireless service – artificially limit consumer choice, restrict device innovation, and lead to higher prices. Of the ten most popular handsets in the market in 2008, eight were tied to various network providers under exclusive

---

[31] Though the *Thirteenth Report* notes that this is not a universal practice. *See id.*
[32] Providers also charge a fee to *upgrade* your handset. *See, e.g.*, "T-mobile Reinstates Useless $18 Handset Upgrade Fee," *Consumerist* (April 26, 2009), http://consumerist.com/5228100/t+mobile-reinstates-useless-18-handset-upgrade-fee.
[33] *See* Brian Bakst, "Minnesota Says Sprint Duped Customers," *Associated Press* (September 27, 2007), *available at* http://www.wirelessforums.org/alt-cellular-sprintpcs/sprint-sued-unapproved-contract-extensions-29588.html.

deals.[34] For the consumer, the result is an artificial restriction on choice of service provider and on switching service providers.[35] In addition to limitations on the consumer's choice of service provider, the consumer faces artificial limitations on a choice of device, because exclusivity arrangements are also a barrier to entry for new entrants in the market for wireless devices.[36] The continued operation of handset exclusivity arrangements in the CMRS market, and their impact on consumers and consumer choice, should be recognized in the *Fourteenth Report* as an indication of ineffective competition.

Exclusivity arrangements impact not only consumer choice, but also market structure, as they constitute a barrier to entry for small service providers. As a direct consequence of exclusive deals between device manufactures and incumbent national service providers, small service providers cannot offer the use of popular handsets and smartphones over their networks. Thus, their services are less attractive to consumers who are driven towards the popular devices that are offered by the incumbent providers, leading to further increase in their market power. These arrangements are of particular concern with respect to the future of wireless services. The future of wireless services, broadband access, and wireless Internet access services in particular,

---

[34] *See* Kristen Beckman, "By the Numbers: Top Ten Most Popular U.S Handsets in November," RCR Wireless (January, 8, 2009) *available at* http://www.rcrwireless.com/article/20090108/wireless/901079989/1081/newsletter33.

[35] In contrast, almost 70–80% of the phones in Europe and Asia are sold independent of the wireless providers. *See, e.g.*, Margarita Schwartzman, "Cheap Unlocked Cell Phones: Switch Cell Phone Providers Without Losing Your Phone," *Articlesbase* (June 5, 2008), *at* http://www.articlesbase.com/cell-phones-articles/cheap-unlocked-cell-phones-switch-cell-phone-providers-without-losing-your-phone-439210.html.

[36] For example, as Dell was considering developing a smartphone, it was faced with significant challenges, including the need to carve out an exclusivity arrangement with a carrier, to market its smartphone. *See* Justin Scheck, "Dell Prepares to Dial Into Smartphone Marketplace," *The Wall Street Journal* (January 30, 2009), *available at* http://online.wsj.com/article/SB123327385680231133.html.

are tied to the use of smart phones,[37] and without the ability to offer them, rural providers will not have the ability to generate enough revenues to deploy 3G networks.[38] Thus, if no action is taken, a similar anti-competitive environment will ensue for the coming 4G network markets.

Additionally, handset exclusivity arrangements give wireless service providers leverage to exert influence over handset innovations that do not meet their approval. Currently, a handset manufacturer is at the whim of the network carrier (with whom the exclusivity contract is drawn) when it introduces new features to market its handset. For example, Nokia was forced to remove some of its features, like Wi-Fi, for the ability to market its e61 phone in the U.S. Nokia was required to eliminate these features because AT&T, the network provider, was apprehensive that consumers would take advantage of VOIP services, thereby reducing the minutes of its wireless phone services.[39] In another example, RIM (the manufacturer of Blackberry) was prohibited by AT&T from offering free mapping services to Blackberry users since AT&T wanted to offer consumers its own mapping services for a fee.[40] Also, AT&T has blocked, disabled, or mutated various other features such as Bluetooth technology, SIM card mobility, direct sound and photo fie transfer capabilities, GPS services, and call timers (*i.e.,* to keep track of minutes used).[41]

Exclusive deals are not required by the structure of the CMRS market, and instead serve as artificial impediments to competition and innovation. The CMRS market in the U.S. is an

---

[37] *See, e.g.*, Richard Wray, "Mobile phone firms bank on smartphones to bail out the industry," *The Guardian* (Feb. 14, 2009), *at* http://www.guardian.co.uk/business/2009/feb/15/mobile-world-congress-report-fewer-delegates.

[38] *See* Reply Comments of United States Cellular Corporation, Attachment, William P. Rogerson, *An Economic Analysis of Exclusivity Arrangements between the Big Four Wireless Carriers and Handset Manufacturers* at 3 n.5, Docket No. RM-11497 (February 23, 2009).

[39] *See* Tim Wu, *Wireless Carterphone*, 1 INTERNATIONAL JOURNAL OF COMMUNICATION 389 (2007), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=962027.

[40] *See* Jessica Vascellaro, "A Fight Over What you Can Do on a Cellphone," *The Wall Street Journal* at A1 (June 14, 2007).

[41] *See id.*

established market for devices. In an established market, device manufacturers do not have to rely on exclusive arrangements with service providers to market their devices or to ensure sufficient revenues to fund the research and development of new products and services. Indeed, this is the case in other established markets, such as Asia and Europe. Handset manufacturers in Asia and Europe are able to sell 70-80% of devices independent of exclusive deals with service providers.[42] Thus, rather than representing an essential feature of the market, handset exclusivity deals are an artificial impediment to competition in the CMRS market.

The market power that U.S. carriers enjoy through the sale of mobile devices not only exacerbates the effects of consolidation in the wireless industry; it also facilitates the provider's leverage to operate via anticompetitive practices, such as the use of handset exclusivity and early termination fees. Under the U.S. wireless market framework, if consumers wish to forgo the high cost of purchasing a cellular phone at full price and using a prepaid cellular plan, they are required to sign a contract with the provider for 1-2 years. In exchange, providers offer to subsidize the price of a new mobile device, thus justifying the use of those contracts so that the consumer can "pay off" the cost of the subsidized phone. Lack of regulation to diversify the sales of mobile devices has thus facilitated the anticompetitive behaviors discussed above, including handset exclusivity and the use of ETFs by CMRS carriers.

F. Market Performance Would Reflect Insufficient Competition.

The *Thirteenth Report* focused its analysis of market performance on average revenue per unit, or ARPU, reporting that ARPU for voice services decreased but was balanced out by

[42] *See* Marguerite Reardon, "Will unlocked cell phones free consumers," *CNet News* (January 24, 2007), *available at* http://news.cnet.com/Will-unlocked-cell-phones-free-consumers/2100-1039_36152735.html.

increases in ARPU for data services.[43] The *Thirteenth Report* also considered network quality and minutes of use, among other factors. Although these factors can indicate a healthy industry and a valuable product for consumers, they fail to demonstrate effective competition. Substantial increasing profits can be generated in an insufficiently competitive industry, while still delivering a desirable product at reduced prices, by failing to lower prices at a rate that matches ever-decreasing costs.

To remedy this, the *Notice* proposes that the *Fourteenth Report* use the profitability of CMRS providers, in part, to determine market performance.[44] Commenters strongly support such an approach. Evaluating provider profitability accurately identifies the level of aggressive competition in an industry, because in an effectively competitive market, if any incumbent provider is generating supracompetitive profits, a new entrant will develop to undercut the incumbent and get a piece of the pie. In the contrapositive, if incumbent providers generate "abnormal profits" and new entrants do not develop, then the market does not demonstrate effective competition. Commenters also support the continued tracking of minutes of use and network quality for voice services, as both indicate market performance from the consumer's perspective. Similarly, the *Fourteenth Report* may also wish to begin tracking bytes of use for mobile broadband and mobile Internet access services.

G. Considering More Fine-Grained Factors Would Reflect Insufficient Competition.

These comments focus on the major analytical criteria of structure, conduct, behavior, and performance, as used by the Commission in the *Thirteenth Report*. Even with these limited criteria, proper analysis of the CMRS market reveals insufficient competition. However, the

[43] *See Thirteenth Report* at para. 195.

[44] *See Wireless Telecommunications Bureau Seeks Comment On Commercial Mobile Radio Services Market Competition*, Docket No. 09-66, Public Notice, at 12 (May 14, 2009) ("*Notice*").

study of industrial economics generally considers a much richer set of criteria within these broader categories for determining whether competition is workable.[45] For example, within the realm of structural criteria, one factor worth considering is whether the market includes artificial barriers to mobility and entry, such as handset exclusivity arrangements.[46] Within the realm of conduct, two factors of note include the presence of exclusionary or coercive tactics (see, again, the example of handset exclusivity arrangements), and the level of misinformation or obscured information in sales promotions.[47] In the category of performance, profit levels that are more than that sufficient to reward investment, efficiency, and innovation may be signs of problems with competition.[48]

The Commission should apply a more detailed economical analysis of the CMRS market in the *Fourteenth Report* using more finely-grained tools, focusing on the perspective of the user and of promoting consumer choice.

III. THE CMRS MARKET RESTRICTS ENTRY AND GROWTH.

Although much of the *Fourteenth Report* will be focused on market structure, conduct, and performance, the *Notice* requests comment and analysis generally on competition in the CMRS market.[49] Commenters therefore offer comment broadly on restrictions to entry and growth in the CMRS market that can be easily remedied with regulatory reform.

Market concentration analysis can only indicate distortions – it cannot explain them. That task falls to other features of the wireless market. In particular, the wireless market

---

[45] *See, e.g.*, F. M Scherer and David Ross, INDUSTRIAL MARKET STRUCTURE AND ECONOMIC PERFORMANCE (Houghton Mifling: Boston, 1990), p. 53-54.
[46] *Id.*
[47] *Id.*
[48] *Id.*
[49] *Id.* at 4.

demonstrates high barriers to entry and growth, including the limited availability of spectrum, rapidly rising prices for wireless backhaul, limitations in roaming regulations, and difficulty in offering popular new devices which are exclusively offered to large incumbent carriers. The *Thirteenth Report* considered primarily spectrum availability as a limit on entry and growth; a scant two paragraphs were spent on other barriers to entry, and the *Report* did not mention many of the most substantial, practical barriers to entry and growth faced by small and nascent wireless service providers, particularly providers of mobile broadband service. Proper analysis of the CMRS market in the *Fourteenth Report* should demonstrate that the current market and regulatory structure cannot adequately remedy ongoing problems with competition. Thus, to promote competition through growth and new entrants in the market, the Commission must adopt policies and a regulatory structure to enable true effective competition.

A. Spectrum Reform Is a Critical Requirement For a Vibrant Wireless Market.

Limited availability of spectrum under current regulatory structures can restrict growth in and entry into the wireless market. But, with a proper regulatory regime, spectrum access should not be a substantial deterrent, as additional spectrum is available, and new technologies enable more efficient and effective use of the spectrum.

1. Advanced technologies enable greater use of and access to spectrum.

Advanced spectrum technologies are changing the way spectrum can be accessed. Interference in wireless transmission is a traditional concept that is no longer a severe constraint on the efficient use of the spectrum. Technologies such as spread spectrum radio and "smart" devices that can coordinate at low power levels without interference are in growing use today. These technologies allow data to be sent between various "smart" devices without interference. Additionally, the link between the frequency of a signal and the amount of data that can be sent

on this frequency is decoupled, allowing for greater data transmission rates even on lower frequencies.

The Commission should identify ranges of spectrum that are or could be made available and could be used more effectively and efficiently through smart devices and proper spectrum allocations and policies. In fact, a large part of the spectrum allocated to broadcasting, military, and other services lies fallow today.[50] To maximize use of this spectrum, the Commission should conduct a full inventory of the nation's spectrum resources.

2. Unlicensed use will enable greater use of and access to spectrum.

To spur competition in the wireless market, the Commission should administer substantial portions of spectrum under a "public good" model. A public good model for spectrum use could be facilitated with the re-assignment of fallow spectrum from licensed to unlicensed (shared) use wherever possible. Undoubtedly, an unlicensed regime should have certain regulations in place to ensure that devices cooperate fairly in using the spectrum.[51] However, unlicensed use of more spectrum will help maximize vitality of the CMRS market.

The benefits of unlicensed spectrum are long term and proven.[52] Wi-Fi is an enormous affirmation of the power of unlicensed spectrum; from its use in homes, office LANs, parks, and public places (amenity unwiring) to wireless ISP (Starbucks, T-Mobile), Wi-Fi has become a

[50] *See, e.g.*, "Congress considers inventory of spectrum use in America," Free103point9 Newsroom (March 25, 2009), *at* http://blog.free103point9.org/2009/03/congress-considers-inventory-of.html.

[51] A "greedy" device that does not conserve the shared spectrum by using greater transmission bandwidth or long transmission intervals would be controlled by implementing technical rules (*i.e.,* modulation, back-off schemes, etc.).

[52] While an auction of the fallow spectrum for exclusive use to a limited number of entities would reap immediate capital, it would stifle the perpetual gains of an open spectrum.

platform for user created value and innovation.[53] While the benefits of unlicensed spectrum are clear, in some instances a balance between licensed and unlicensed use of the spectrum is required. For instance, although unlicensed use enables greater utilization of the spectrum, applications such as broadcast television and public safety communications require greater quality of service, and thus would be better served by licensed spectrum allocations.[54]

By recently opening up white spaces for unlicensed use,[55] the Commission has already taken the first step towards unlicensed spectrum. However, more must be done to ensure that markets throughout the country, especially rural and underserved areas, will benefit from the opening of these fallow bands in the spectrum. Currently, transmission in these white spaces is limited to low power devices. This hinders the adoption of wireless use in rural areas since low power transmission requires a network with many towers, access points, and repeaters to maintain signal strength. Promoting transmission using a higher power level in rural and underserved areas would make wireless broadband more accessible to these communities.

B. Special Access Reform Is Essential.

Another barrier to entry and growth in the CMRS market, particularly in the offering of mobile Internet access services, is the current market norm of unreasonable special access pricing, terms, and conditions. Smaller (and new) carriers that do not own broadband infrastructure rely on special access transmission paths to support their telecommunication

---

[53] *See, e.g.*, Clay Shirky, "The Possibility of Spectrum as a Public Good," *Networks, Economics and Culture* (August 13, 2004), *available at* http://www.shirky.com/writings/spectrum_public_good.html.

[54] *See* Jon Peha, Carnegie Mellon University, *Emerging Technology and Spectrum Policy Reform* (January 2007) *available at* http://www.itu.int/osg/spu/stn/spectrum/workshop_proceedings/Background_Papers_Final/Jon%20Peha%20ITU%20spectrum%20workshop.pdf.

[55] *See In the Matter of Unlicensed Operation in the TV Broadcast Bands, Additional Spectrum for Unlicensed Devices Below 900 MHz and in the 3 GHz Band*, 23 FCCRcd 16807, Second Report And Order And Memorandum Opinion And Order (2008).

businesses.[56] Competition is necessary in the special access market to ensure that dominant incumbent carriers do not overcharge for the use of these lines or impose unreasonable terms and conditions.

Currently, few incumbent providers of special access exist. As a result, they are able to use their market power to offer high special access prices.[57] For example, in 2007, Verizon received a 700% rate of return for the use of its special access services.[58] These types of special access rates introduce hurdles for small and new wireless providers, especially when they have to compete with the incumbents (who are already at an advantage due to special access pricing) in the last mile of the network. The Commission should ensure that these small providers are protected from unreasonable special access pricing so that they can focus on using their capital for providing better services and products to customers.

The Commission currently assesses the need for special access price regulation based on market competition. However, the Commission's methodology for measuring competition has been evaluated as incorrect in various studies that have been conducted. The Commission measures competition by the number of competitive carriers who set up their equipment on an incumbent's network in Metropolitan Statistical Areas.[59] By setting up equipment in the incumbent's network, the small competitive carrier is assumed to have made a long term investment that will keep a check on any market power that the incumbent exerts.

---

[56] Special access also caters to the telecommunication needs of vital institutions like hospitals, universities and banks.

[57] *See, e.g.,* Peter Bluhm and Robert Loube, *Competitive Issues in Special Access Markets*, National Regulatory Research Institute (January 21, 2009); Matthew Lasar, "Report Reignites Fights over Special Access Rates," *Ars Technica* (January 26, 2009), *at* http://arstechnica.com/tech-policy/news/2009/01/report-reignites-fight-over-special-access-rates.ars.

[58] *See* Derek Turner, Free Press, *Dismantling Digital Deregulation: Towards a National Broadband Study* (2009).

[59] *See* Bluhm and Loube, *supra* note 57.

However, according to the Government and Accountability Office ("GAO"), this gives an inaccurate estimation of competition.[60] The GAO has noted that the Commission's assessment does not take into account that some of these competitive carriers either merge with the incumbents or do not survive in the long term.[61] The GAO suggested that pricing and market power also factor in the equation for determining competition.[62] Also, the National Association of Regulatory Utility Commissioners has conducted a study recently which too advised the Commission against the use of its current methodology for measuring competition in special access markets.[63]

C. Consolidation Has Harmed Growth and Access for New Entrants.

Consolidation of market power in the CMRS market has created barriers to entry for new entrants and fosters an anti-competitive environment. Most of this consolidation has been possible due to the absence of spectrum caps – without spectrum caps, the large market participants have advantages in growing larger and acquiring new spectrum. Vertical integration among wireline and wireless providers has also prevented growth in the CMRS market.

1. The elimination of spectrum caps has facilitated consolidation.

To prevent incumbent wireless providers from getting the "first-mover advantage," spectrum caps were introduced by the Commission in 1994.[64] However, these spectrum caps were terminated in 2003 on the premise that no single wireless provider had significant market

---

[60] *See* U.S. Government and Accountability Office, *Telecommunications: FCC Need to Improve Its Ability to Monitor and Determine the Extent of Competition in Dedicated Access Services* (November 19, 2006).
[61] *See id.*
[62] *See id.*
[63] *See* Bluhm and Loube, *supra* note 57.
[64] *See* Simon Romero, "F.C.C Is Expected to Lift Airwave Spectrum Cap," *The New York Times* at C6 (November 8, 2001), *available at* http://www.nytimes.com/2001/11/08/business/fcc-is-expected-to-lift-airwave-spectrum-cap.html.

power that could prove to be a threat to competition.[65] Since then, there has been a transition from a CMRS market that thrived on competition to one that is influenced by a few incumbent providers.

In the absence of spectrum caps, incumbent providers have gained access to large portions of the spectrum. For example, the recent 700 Mhz spectrum auction substantially increased the market power of two incumbents – AT&T and Verizon – leaving the market highly susceptible to anti-competitive actions.[66] Even when Commission regulations force one of the two big carriers to divest spectrum, the other of the two often purchases it, leaving unchanged the market share held by the big two.[67] The elimination of spectrum caps has enabled the two largest providers to use their purchasing power at spectrum auctions and ward off new entrants in the market. The Commission should consider readopting a spectrum cap to ensure that small and new providers are able to access the available spectrum resources of the nation.

2. Joint ownership and lack of intermodal competition among wireline and wireless providers restrain growth in the wireless market.

CMRS carriers that are also incumbent wireline providers – namely AT&T and Verizon – hold disproportionate power in the wireless market. Lack of regulation permits incumbents to utilize a number of anticompetitive measures to demonstrate power in the market. First, incumbents hold the capacity to position themselves and their products to ensure that customers who switch from the wireline service will remain users of wireless service offered by the same

---

[65] *See* Press Release, Federal Communications Commission, FCC Announces Wireless Spectrum Cap To Sunset Effective January 1, 2003 (November 8, 2001), *available at* http://www.fcc.gov/Bureaus/Wireless/News_Releases/2001/nrwl0129.html.

[66] *See* Bryan Gardiner, "In Spectrum Auction, Winners Are AT&T, Verizon and Openness," *Wired* (March 20, 2008), *at* http://www.wired.com/epicenter/2008/03/fcc-releases-70.

[67] John Paczkowski, "AT&T and Verizon Sitting in a Tree, D-U-O-P-O-L-Y," *Digital Daily* (May 11, 2009), *at* http://digitaldaily.allthingsd.com/20090511/att-and-verizon-sitting-in-a-tree-d-u-o-p-o-l-y/.

provider. It has been estimated that after its merger with Cingular, AT&T gained an 82% probability of capturing a customer who cancelled his or her wireline service into AT&T's wireless pool.[68] As a former Bellsouth CEO described in 2001, "Wireless substitution is now a fact. That's okay. We tend to own both."[69]

Second, incumbents hold the exclusive ability to bundle wireline and wireless services to dissuade their customers from wireline-wireless substitution and to retain their overall subscriber base. In 2004, for example, Verizon introduced its "iobi" platform, which integrated wireline, wireless, and data services so that customers could access features of each in a seamless fashion.[70] Although wireline-wireless bundling may not have received the same success as some other bundling ventures, intermodal market power held by wireline incumbents grants them access to attempt to push subscribers "cutting the cord" towards their own wireless services.

D. Loopholes In Roaming Regulations Limit New Entrants And Growth.

In August 2007, the Commission ruled that voice roaming, or the ability to place a call outside of a CMRS provider's network without taking special action to initiate that call, is a common carrier service that must be provided on a "just, reasonable, and non-discriminatory basis."[71] In other words, carriers could not refuse to provide roaming service to other carriers when technologically possible, and carriers could not charge unreasonable rates for the service.

---

[68] *See* Lawrence J. Spiwak, "Fixed-Mobile 'Intermodal' Competition in Telecommunications: Fact or Fiction?" Phoenix Center Policy Bulletin No. 10 at 9 (March 31, 2004).

[69] Duane Ackerman, "More Callers Cut off Second Phone Lines for Cellphones, Cable Modems," *Wall Street Journal* at B1 (November 15 2001).

[70] *See* Zimmerman, P. R., *The Cingular/AT&T Wireless merger, wireline-affiliated wireless carriers, and intermodal competition in telecommunications*, Working Paper (2005). Zimmerman also mentions a similar effort by Bellsouth and Cingular in their launch of a service that provided a single pool of minutes for both wireless and long-distance wireline use.

[71] *In the Matter of Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers*, WT Docket 05-265, Report And Order And Further Notice Of Proposed Rulemaking, 22 FCC Rcd 15817 (2007) ("Roaming FNPRM").

However, the Commission enacted two harmful limitations to these automatic roaming obligations that result in continued substantial limitations to market entry and growth.

First, the Commission placed a so-called "home" or "in-market" exception that allows CMRS carriers to refuse to provide automatic roaming in any area where the requesting carrier merely holds a wireless license or spectrum usage rights. The adoption of this rule effectively removed Title II common carrier protections, which would subject CMRS providers to enforcement action if they fail to enter roaming agreements with competitors. The exception now gives large facilities-based network operators, such as AT&T and Verizon, the ability to deny roaming to a smaller competitor if that competitor has a license within a large operator's any given "home" area. This creates a disincentive for small companies to seek out additional spectrum licenses – a precondition for building towers and expanding service and growing as a competitor – lest they lose their rights to roam in those regions adjacent to their current service territories, those regions where they most need to grow and yet most need to maintain service.

Even within current service territories, the "in-market" loophole means that consumers of a competitive wireless provider's service may be unable to make or receive calls in portions of their own city or town, but will receive roaming service when traveling outside of their "home" market. This means that some consumers may receive wireless service in their homes, but may be unable to make calls in their workplace or while traveling around town. Such service limits are highly confusing for the consumer. Further, the in-market exception may prevent some subscribers from accessing emergency alerts, placing the safety of consumers at undue risk.[72]

[72] *See* Public Knowledge on behalf of Public Interest Spectrum Coalition, *Notice of Ex Parte Filing, Docket No. 05-265, Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers* (August 13, 2008).

The Commission should eliminate the in-market exception and ensure that equitable roaming services are provided to all wireless carriers and consumers nationwide.

Second, the Commission also limited the mandate for automatic roaming to real-time, two-way switched voice and data services that are interconnected with the public switched telephone network, along with push-to-talk and SMS services. The Commission chose not to extend automatic roaming obligations to non-interconnected services, including in particular data services such as mobile Internet access. Unequal treatment of different mobile wireless services once again presents a confusing, yet potentially costly, framework for the consumer. It further limits the ability of smaller competitors and new entrants to deliver high-quality, high-range mobile broadband and mobile Internet access services to their customers, the very services most needed for growth in the modern CMRS market.

The combination of these two loopholes creates substantial barriers to entry and growth for would-be competitors in CMRS services. At a minimum, the impact of these policies on the state and growth of competition should be evaluated in the *Fourteenth Report*.

IV. CONCLUSION

Competition leads to lower prices, higher speeds, better services, broader deployment, and more innovation. With insufficient competition, incentives to invest are reduced, prices remain artificially high, and consumers suffer while inflating the profit margins of major corporations. The current CMRS market is simply not sufficiently competitive, and the Commission should aggressively pro-competitive regulatory policies to revive and expand wireless competition.

Respectfully submitted,
/s/
Parul P. Desai
Counsel for Consumers Union

Chris Riley
Counsel for Free Press

Mark Cooper
Consumer Federation of America

Joel Kelsey
Consumers Union

Ben Scott
Chris Riley
Free Press

Parul P. Desai
Andrew Jay Schwartzman
Kamilla Kovacs
Shanu Pant
Media Access Project

Michael Calabrese
Sascha Meinrath
New America Foundation

Harold Feld
Gigi Sohn
Public Knowledge

June 15, 2009