



Written Testimony of

Matthew F. Wood
Policy Director
Free Press

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Subcommittee on Antitrust, Competition Policy and Consumer Rights

regarding

“An Examination of Competition in the Wireless Market”

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INTRODUCTION

Chairman Klobuchar, Ranking Member Lee, and esteemed members of the Subcommittee, thank you inviting me to testify for “An Examination of Competition in the Wireless Market.”

My name is Matt Wood, and I am the Policy Director for Free Press, a nationwide, nonpartisan and nonprofit organization with more than 700,000 members in the United States and around the world. Free Press promotes public interest media and technology policies, working to strengthen democracy by strengthening the tools we use for free expression and economic activity. We advocate for diverse media ownership and quality journalism. We focus especially on promoting open, universal and affordable Internet access and communications platforms.

Competition in the wireless market is key to providing that type of access for everyone. The truth is that the United States’ wireless market today does exhibit a greater level of competition than some other telecommunications industries. If that sounds like a back-handed compliment, it is – considering the dire state of competition for wired broadband.

The U.S. wireless market has displayed some positive trends recently. Yet those have not carried us far enough, and the pace of progress to this point has been too slow. Even the most proactive and pro-competitive steps taken by the Department of Justice (“DOJ”) and the Federal Communications Commission (“FCC”) have, at times, seemed laborious and beset by controversy.

In reality, these agencies’ positive actions have been grounded in the law and common sense – and, if anything in the Commission’s case, have not yet done enough to implement Congress’s directives. The FCC is charged with promoting the “rapid deployment of new technologies” and “economic opportunity and competition” by preventing “excessive concentration of licenses”¹ and other anticompetitive practices. And that agency is in fact the only bulwark communications customers have against such practices in most contexts other than mergers and acquisitions, due to the limitations of antitrust enforcement after *Verizon v. Trinko* in putatively regulated markets.

In this testimony, we first present some facts and figures illustrating the current performance of the wireless market. Despite some positive DOJ and FCC actions over the past two years, such as the denial of the AT&T/T-Mobile merger and the encouragement of spectrum divestitures in the Verizon/SpectrumCo acquisition, the wireless sector continues to show signs of excessive concentration and market power exercised by a more and more entrenched duopoly. This leads to the loss of untold billions of dollars per year in consumer surplus.

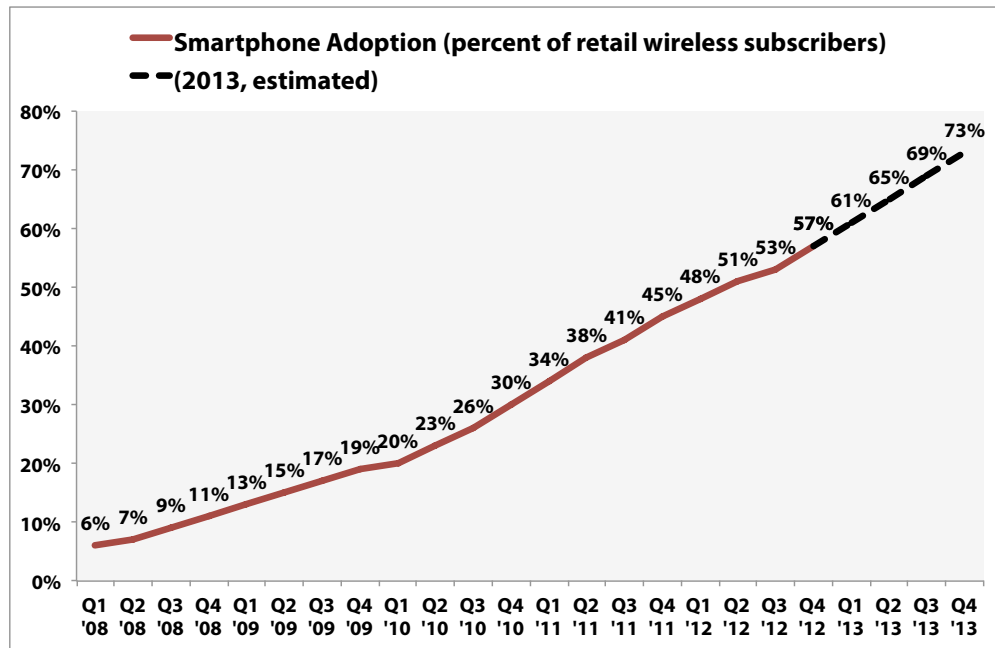
The problems allowing the “big two” carriers to cement their lead are many, but the solutions to these problems can be grouped into three categories. The FCC, along with Congress and antitrust enforcement agencies when necessary, must do more to (1) give customers control over their own devices, (2) remove barriers in the input markets for wireless services, and (3) open space for innovation by opening more spectrum to shared and unlicensed use, rather than supposing that a “spectrum crunch” dictates clearing and auctioning every frequency we can.

¹ See, e.g., 47 U.S.C. § 309(j)(3).

THE U.S. MOBILE WIRELESS INDUSTRY IN THE SMARTPHONE ERA

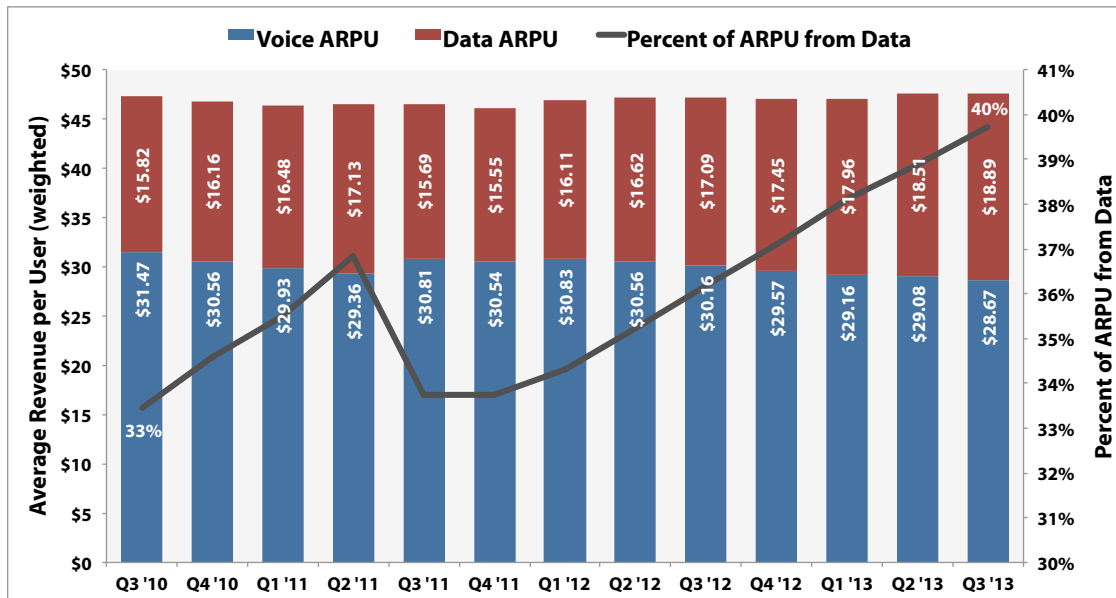
When Apple Inc. introduced the first model of the iPhone in 2007, it heralded the start of the smartphone era for the U.S. mobile wireless market. The strong consumer demand for mobile connectivity that followed reshaped the wireless industry, moving it from a voice-centric market to a data centric one in a half-decade's time.

Figure 1: The Rapid Adoption of Smartphones



Source: SNL Kagan; Free Press Research

Figure 2: U.S. Wireless Industry Average Revenues per User – Voice/SMS vs. Data



Source: SNL Kagan; Free Press Research

Continued Concentration in the Mobile Wireless Market

The wireless market has become substantially more concentrated. According to data derived from the Numbering Resource Utilization Forecast, a decade ago the industry’s Herfindahl-Hirschman Index (“HHI”) stood at 2,450, below DOJ’s current threshold for a “highly concentrated market.” With the acquisition of several regional and pre-paid carriers by the national carriers, we estimate wireless industry HHI *today* at approximately 3,000.²

Industry-wide, AT&T and Verizon control more than 68 percent of the subscribers and bring in more than 82 percent of the profits. Verizon alone enjoys nearly 50 percent of industry profits.³

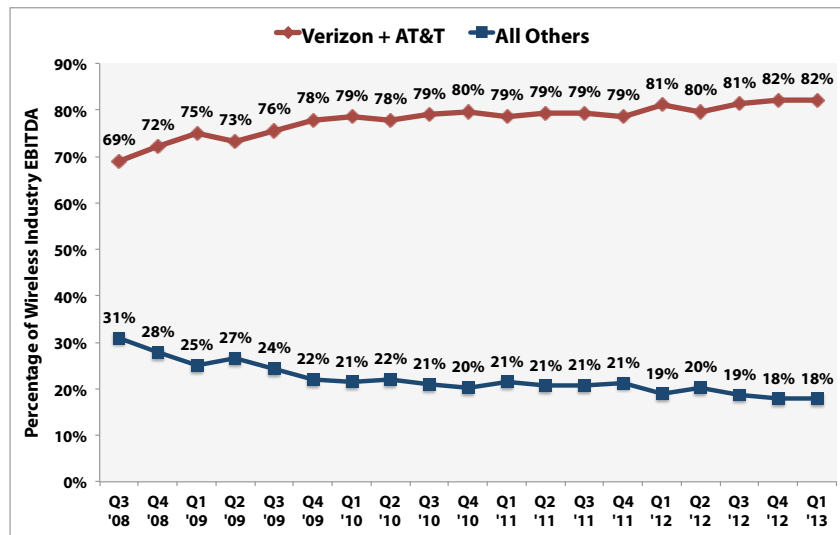
Figure 3: The U.S. Wireless Market — Subscriber Market Share (Q3 2013)

Carrier	Market Share (Subscribers, Q3 2013)	Cumulative Share
Verizon*	35%	35%
AT&T^	34%	68%
Sprint	16%	85%
T-Mobile	13%	98%
US Cellular	1%	99%
All Others	1%	100%

Source: SNL Kagan; Free Press Research.

* Includes estimate of Verizon’s wholesale connections. ^ Includes Leap Wireless Subscribers

Figure 4: Duopoly Market Power — AT&T and Verizon’s Share of Profits vs. All Others



Source: SNL Kagan; Free Press Research.

² This estimate derives from 2011 NRUF data, accounting for changes in market share through September 2013. As with the profitability estimate below, it assumes that AT&T will close its acquisition of Leap Wireless.

³ Free Press research based on SNL Kagan Industry Update Q4 2012 (Apr. 2013) and company reports, including estimate for Verizon Wireless’ wholesale lines. Profit defined as Earnings Before Interest, Taxes, Depreciation and Amortization (“EBITDA”).

Even though other national carriers, T-Mobile USA and Sprint, attempt to innovate in their plans and service offerings to attract customers, AT&T and Verizon’s profit margins continue to increase as their churn declines. This is a strong indication that the U.S. mobile wireless market functions as a duopoly, in which the two largest carriers enjoy and exercise market power.

Paying More for Less – Excessive Concentration and Parallel Conduct

As more and more Americans connect to the mobile Internet, our use of traditional mobile voice minutes and text messaging services is in steep decline. But this change in consumption is not saving consumers any money, as the major carriers have eliminated plans offering a certain number of voice minutes in favor of unlimited-only offerings. This means many post-paid users are no longer able to switch to a less expensive plan with a smaller amount of minutes and texts.

Returning to the beginning of the smartphone era, for example, in 2008 an AT&T iPhone customer could purchase a plan with 450 voice minutes, 200 text messages and unlimited mobile data for \$60 per month. Today that AT&T user must pay a base rate of \$95 per month for unlimited voice and texts, with just 2 gigabytes (GB) of data. If the user does not need unlimited voice and texts, this equates to a whopping 58 percent rate-hike.

Figure 5: Less is More for AT&T Customers — 2008 vs. 2013 Smartphone Plans

Monthly Plan	Price (\$/month)	Voice Minutes	Texts	Data	Excess Data Charge
AT&T (original iPhone)	\$60	450	200	Unlimited	N/A
AT&T (current entry-level offering)	\$60	Unlimited	Unlimited	0.3 GB	\$20 for 0.3 GB
AT&T (current offering, 1 GB data)	\$85	Unlimited	Unlimited	1 GB	\$15 for 1 GB
AT&T (current offering, 2 GB data)	\$95	Unlimited	Unlimited	1 GB	\$15 for 1 GB

Source: Free Press Research; based on historical data and current plans as of January 2014

A Verizon Wireless plan similar to this AT&T offering – with the same unlimited voice and text messaging, and the same 2 GB data allotment – costs \$90 per month. The other two national carriers offer similar plans that are less costly, though still not priced as low as budget options.

It is worth noting that unlimited data was and is a useful feature, as the upward bound on the amount of data any single customer may use in a month depends entirely on the size of the files that this user sends, downloads or streams. Unlimited voice calling, on the other hand, is limited in its utility by the number of hours in the day any customer can possibly spend on the phone – no matter how much one likes to talk.

Wireless carriers have realized, quite obviously, that their growth in usage and revenues is in data, not voice. (See Figure 2, above.) Fewer and fewer individuals today use their devices primarily to make and receive voice calls. That’s why many carriers have flipped their model, making low-bandwidth and low-cost voice an unlimited service (despite the declining demand for it) while imposing new limited data plans to generate more revenue from data usage. The elimination of unlimited data plans along with steep overage fees for additional data usage also means that many users may be subjected to potential “bill shock” and surprise charges.

Leading the Way in High LTE Prices, Not Performance

The U.S. wireless industry and some regulators have claimed that the United States is the world leader in the deployment of 4G, Long Term Evolution (“LTE”) mobile wireless services.⁴ Whatever the validity of statistics showing U.S. leadership in terms of the number of LTE subscribers or amount of traffic, a report released last week shows that U.S. carriers delivered LTE download speeds nearly two to three times slower than providers in other countries.⁵ The resulting LTE prices are 50 percent higher or more on a Megabits per second (“Mbps”) basis than rates from carriers in Canada, Germany, South Korea and the United Kingdom.⁶

Handset “Subsidies” – Another Case Study in Hidden Costs and High Prices

The smartphone market (both for handsets and the services those devices use) is approaching maturity. Yet most hardware vendors, carriers and consumers remain hopelessly locked into the market’s original “subsidy” business model. While many consumers would balk at paying \$650 up front for an iPhone (the full “unsubsidized” price), economically the “subsidy” amounts to nothing more than a 2-year *loan* – at rates that would make a payday lender blush.

For example, Tracfone (a mobile virtual wireless network operator, or “MVNO”) sells a \$45 monthly service package that includes unlimited voice and texts along with 2.5 GB of data. This service uses AT&T’s network, and does not include any so-called subsidy for the phone. Thus we can assume that this price point is close to what we’d see in a more competitive market without device subsidies. An iPhone user would save \$50 per month in service fees by purchasing an unsubsidized device for \$649 and using a Tracfone-issued AT&T SIM card, versus paying AT&T \$199 for the device under a 2-year contract. As Figure 6 shows, the cost for AT&T’s device subsidy amounts to an annual interest rate of *120 percent*.

AT&T has begun offering a lower price point for users who bring their own devices under the “Next” program. However, this “unsubsidized” offering is still vastly over-priced relative to what a competitive market should produce, as AT&T’s monthly service charge for these plans far exceeds the Tracfone price for a plan that offers 500 MB more data.

Figure 6: The True Cost of Carrier Device Subsidies

Carrier	Plan	Contract Length	Device Purchase Price	Device Subsidy	Monthly Service Plan Cost	Monthly Price Difference Relative to Tracfone	Effective Interest Rate vs. Tracfone
AT&T	Unlimited voice/SMS, 2 GB data	24 months	\$199	\$450	\$95	\$50	120%
AT&T (Next)	Unlimited voice/SMS, 2 GB data	no contract	\$649	\$0	\$80	\$35	69%
Tracfone (AT&T network)	Unlimited voice/SMS, 2.5 GB data	no contract	\$649	\$0	\$45	\$0	0%

Source: Free Press Research; based on current plans as of January 2014

⁴ See, e.g., Julius Genachowski, “Winning the Global Bandwidth Race: Opportunities and Challenges for Mobile Broadband,” Oct. 4, 2012, http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-316661A1.pdf.

⁵ See Dante D’Orazio, “American wireless customers pay more for less speed,” *The Verge*, Feb. 21, 2014, <http://www.theverge.com/2014/2/21/5434450/cost-of-american-wireless-data-speed-compared-to-the-world>; see also Open Signal, “The State of LTE,” Feb. 2014, <http://opensignal.com/reports/state-of-lte-q1-2014/>.

⁶ See D’Orazio, “American wireless customers pay more for less speed.”

Furthermore, neither the price that the carriers themselves reportedly pay nor the retail price for an unlocked iPhone has changed since 2008. This is a classic example of the problems that arise in a market where true costs are hidden from consumers and shielded from market forces. If U.S. carriers got out of the subsidy business completely, it is likely that device prices would drop dramatically, as they have in the rest of the computing hardware industry.

POLICY SOLUTIONS TO PROMOTE MORE EFFECTIVE COMPETITION

Giving Wireless Customers More Control Over Their Devices and Device Costs

If wireless users could do more with devices they buy – unlocking them, taking them to other carriers, using them easily on those networks, and protecting them against theft – consumers would see their service choices increase and their out-of-pocket expenditures go down.

T-Mobile’s efforts to break the so-called “subsidy” model described above, begun in March 2013 and continued with announcements at the January 2014 Consumer Electronics Show, may provide some hope for customers seeking to avoid lengthy contracts and usurious interest rates.

The other national carriers have moved to match some of these innovations. This proved yet again the wisdom of DOJ’s and the FCC’s decision to block the AT&T/T-Mobile acquisition and preserve at least four national wireless carriers, among them a noted “maverick” firm that has a history of innovating and competing aggressively to win customers away from its larger rivals.⁷ The decline in the subsidy model for post-paid plans, and the hidden prices this model entails, may then be attributed in part to structural antitrust remedies effectuated by DOJ and the FCC.

FCC Data Roaming, Interoperability and Unlocking Decisions Should Spur Competition

The FCC has moved in the last three years – often too slowly, but more steadily of late – to increase wireless customers’ freedom to use smartphones and other devices for which these customers pay so much. The jury is still out on three FCC measures in particular – data roaming, 700 MHz interoperability, and phone unlocking commitments made in December 2013 by several wireless carriers – not because of any flaw in the principles the FCC adopted, but because the market has yet to see as many tangible benefits as it eventually should realize.

In May 2011, after a lengthy delay, the FCC extended to data traffic the reasonable roaming negotiation requirements it had maintained for voice traffic, promoting national, regional and smaller competitive carriers’ ability to offer service and coverage plans comparable to the big two carriers’ offerings. The FCC’s data roaming order was upheld by the D.C. Circuit, over Verizon’s challenge, in that court’s December 2012 *Cellco v. FCC* decision. Despite the victory on the merits, competitive carriers continued to report as recently as 2014 that 4G data roaming agreements with AT&T and Verizon were essentially non-existent.⁸

⁷ See Joint Petition to Deny of Center for Media Justice, Consumers Union, Media Access Project, New America Foundation, and Writers Guild of America, West, WT Docket No. 11-65, at 19-28 (filed May 31, 2011).

⁸ See CCA Written *Ex Parte* Presentation, WT Docket No. 13-193, at 2 (filed Jan. 3, 2014) (“CCA is unaware of AT&T having entered into *any* 4G LTE roaming agreements with U.S. carriers to date.”) (emphasis in original).

The FCC’s October 2013 700 MHz A Block interoperability order⁹ contains a resolution, brokered by the Commission and Acting Chairwoman Clyburn, in which AT&T will finally begin rolling out devices that will work on spectrum licensed to carriers other than AT&T itself. This should signal the end of proprietary band classes that severely hampered competitors’ ability to obtain devices. AT&T’s commitment, however, is to begin placing such devices in service by mid 2015, meaning once again that FCC resolution was too long delayed for a technical and commercial dispute that continues to harm competition for mobile broadband.

Finally, in December 2013, FCC Chairman Wheeler obtained commitments from the five largest U.S. wireless carriers to more readily “unlock” customers’ phones, at least after those customers had fulfilled any service contract or paid any early termination fee to the original carrier.¹⁰ The Chairman’s focus on unlocking was welcome, and clearly spurred by legislative efforts to address this problem undertaken by Senators Leahy, Klobuchar, Lee, Blumenthal, Franken, Grassley, and so many others. Yet the FCC’s acceptance of voluntary commitments leaves the enforceability of such rights in question, and its focus on unlocking only *after* a customer has fulfilled her contract begs the question of the reason for permitting locking in the first place. Wireless consumers must honor the contracts they sign and may incur early termination fees for breaking those contracts; but there are any number of uses that an owner might make of an unlocked device during the term of the service contract, without breaching that contract.

“Kill Switch” Legislation Could Help to Prevent Device Theft and Consumer Losses

In December 2013, Chairman Klobuchar and others began asking salient questions about wireless carriers’ apparent refusal to provide their customers with more effective theft deterrent measures. She was joined by other Senators and Representatives, and by elected officials ranging from the Attorney General of New York to the District Attorney of San Francisco.

Citing estimates that peg wireless phone thefts at a \$30 billion loss to consumers each and every year, as well as statistics reporting that 1 in 3 robberies now involve a smartphone or other wireless phone, she introduced the “Smartphone Theft Prevention Act,” S. 2032, co-sponsored by Senators Hirono, Mikulski, and Blumenthal. The bill would ensure consumers have the capability to wipe personal information from a stolen device and render the phone inoperable remotely – discouraging theft by making the target devices far less useful and resaleable.

Removing Barriers in the Input Markets for Mobile Wireless Services

Many current competitive problems in the mobile wireless market stem from incumbency advantages decades in the making. Because of their inherent advantages as legacy wireline monopolists and early cellular spectrum recipients, it is wholly unsurprising that the former “baby Bell” companies dominate the wireless market. These advantages are many, but their dominance in spectrum and in special access are especially noteworthy.

⁹ *Promoting Interoperability in the 700 MHz Commercial Spectrum*, Report and Order and Order of Proposed Modification, WT Docket No. 12-69, 28 FCC Rcd 15122 (2013).

¹⁰ See Brendan Sasso, “FCC, cellphone carriers agree to ‘unlocking’ policy,” *The Hill*, Dec. 12, 2013, <http://thehill.com/blogs/hilicon-valley/192998-fcc-cellphone-carriers-agree-to-unlocking-policy>.

The FCC Should Adopt Meaningful, Industry-wide Spectrum Aggregation Limits

AT&T and Verizon have parlayed their early lead in spectrum holdings, built by these companies and their predecessors, into a position of spectrum dominance that continues to this day. Those advantages have been perpetuated by FCC policies that do little to promote the efficient allocation of this valuable public resource. As a result, AT&T and Verizon in many markets control almost all “beachfront” spectrum below 1 GHz. This gives the twin Bells substantial advantages in terms of network quality and deployment costs relative to their rivals.

The upcoming 600 MHz incentive auction provides one opportunity to promote a more competitive outcome. Instead of focusing solely on this admittedly important auction, however, the FCC should adopt broad and sensible safeguards against excessive concentration of licenses that apply to all spectrum holdings.

Mobile wireless broadband providers simply cannot exist without adequate access to spectrum. Competition cannot exist if a few providers control too much of the public airwaves. Congress gave the FCC the responsibility of allocating and assigning spectrum in a manner that protects competition and promotes the public interest, but the FCC has too frequently abdicated this responsibility.

As shown above (see Figures 3 and 4), concentration in wireless industry is high. It stands at a level that stifles meaningful competition in the mobile services market. One reason for such concentration in the wireless market overall is concentration in the spectrum input market, and the problem could continue to worsen. DOJ argued convincingly in an April 2013 filing at the FCC that spectrum at auction may have a high “foreclosure value” to wireline and wireless incumbents – such as AT&T and Verizon – that can bid to prevent rivals from obtaining additional capacity and improving their wireless services. In other words, the upcoming incentive auction could exacerbate excessive concentration of spectrum in two companies’ hands, and will not promote competition without proper spectrum aggregation limits and auction design in place.

Some parties commenting in the FCC’s incentive auction docket, in advance of the planned forward auction of recovered TV band spectrum, have proposed intra-auction limits on how much a single carrier could obtain in this auction.¹¹ Others have proposed spectrum weighting systems¹² or dynamic auction structures¹³ intended to ensure that some spectrum will be available at auction to carriers other than AT&T and Verizon.

Without rejecting any of these proposals out of hand, Free Press has called for the FCC to reinstitute industry-wide spectrum aggregation limits in the Commission’s Mobile Spectrum Holdings proceeding.¹⁴ This approach fully complies with the incentive auction statute’s grant of authority for the FCC to “adopt and enforce rules of general applicability, including rules

¹¹ See, e.g., Comments of United States Cellular Corporation, GN Docket No. 12-268, at 30 (filed Jan. 25, 2013).

¹² See Sprint *Ex Parte* Presentation, WT Docket No. 12-269 (Feb. 11, 2014).

¹³ See T-Mobile *Ex Parte* Notice, GN Docket No. 12-268 (June 21, 2013).

¹⁴ See, e.g., Comments of Free Press, WT Docket No. 12-269, at 14-19 (filed Nov. 28, 2012).

concerning spectrum aggregation that promote competition.”¹⁵ This also would bring to a welcome close the “spectrum screen” chapter of the FCC’s history – a screen that has been full of holes allowing excessive concentration of licenses in the hands of the two largest carriers.

The FCC’s screen is partly to blame for the sorry state of competition in America’s wireless market. This is a relatively recent policy failure, brought on by the agency’s unwillingness and inability to remain a vigilant antitrust enforcer, and a misguided belief that competition in naturally uncompetitive markets will thrive in the absence of clear regulatory oversight. Free Press suggests that the FCC rectify this failure by returning to sensible spectrum policies based on antitrust theory and practice.

The FCC should determine if a proposed license acquisition (at auction or on the secondary market) would result in an applicant controlling more than 35 percent of spectrum suitable and available for mobile broadband in a given local market. A higher cap specific to sub 1 GHz spectrum might also be appropriate, limiting carriers to no more than 40 percent of that spectrum. Even if an applicant’s holdings would not exceed these amounts, the FCC should also consider the impact of a proposed license acquisition on the concentration of spectrum holdings in a given local market, measured by the well-established standards described in DOJ’s *Horizontal Merger Guidelines*.

Under the framework Free Press proposes, applicants or outside parties could petition to overcome presumptions in favor of or against an acquisition measured under these standards. An applicant might still attempt to show that an acquisition would promote competition and not increase the applicant’s market power. On the other hand, an acquisition that did not put the applicant above these clear limits or lead to an excessive increase in market concentration would be presumed to be in the public interest and would receive expedited treatment.

The FCC Should At Last Move Forward on Reforming the Special Access Market

AT&T’s and Verizon’s legacy wireline operations also form the basis for continued dominance in the special access market, in which these wireless duopolists are able to impose higher costs on their rivals’ “backhaul” transport of traffic from wireless towers to the public switched telephone network or the Internet. If anything, the FCC has been even less effective monitoring – much less regulating – market power in this crucial mobile wireless services input market than it has in the licensed spectrum input market.

The Commission embarked on an unfounded and ultimately unsuccessful path in 1999 to deregulate incumbent local exchange carrier (“ILEC”) provision of these services, based on the expectation of competition that did not actually materialize. That expectation should have been revisited at the very latest in 2005, after ILECs SBC and Verizon acquired their chief potential rivals for provisioning of such services, AT&T and MCI. Though in truth, that expectation was flawed from the outset, because mere collocation of facilities by a potential competitor in an ILEC’s wire center ever should not have been considered an indication of actual and effective competition.

¹⁵ 47 U.S.C. § 309(j)(17)(B).

Nearly 15 years after the FCC first granted dominant incumbents a great degree of pricing flexibility for such special access services, wireless carriers (and other large scale enterprise users) continue to pay the price for that decision, with prices invariably “flexing” upwards. The Commission’s hesitance to correct course, or until recently even to stop the bleeding from this mistake, has been baffling.

In an August 2012 order, in perhaps the understatement of that year by the agency, the FCC concluded that “that these rules, adopted in 1999, are not working as predicted.”¹⁶ Citing “significant evidence” that the purported relief crafted by the agency in 1999 was in fact hindering competitive wireless carriers’ ability to invest in their networks, and otherwise “causing real harm to American consumers and businesses,” the FCC determined that “the Commission’s existing collocation triggers are a poor proxy for the presence of competition sufficient to constrain special access prices or deter anticompetitive practices.”¹⁷ Yet the Commission remains frozen to this day. In July 2013, it once again extended the deadlines for its data gathering efforts by more than half a year, to dates in March and April 2014.

Opening Space for Innovation by Opening More Spectrum to Shared and Unlicensed Use

While there is still a vital role for use of spectrum licensed to wireless carriers, unlicensed use of airwaves throughout the entire spectrum band promotes innovation by allowing new entry as well as the growth of new technologies and business models. It also promotes competition and efficiency by allowing for the “offload” of traffic from licensed networks to spectrum available for shared use, diminishing the purported “spectrum crunch” and allowing licensed carriers to make better (and more sparing) use of expensive cellular networks and infrastructure.

Projections chronically overestimate the amount of data that licensed spectrum will need to carry in the U.S. and worldwide over the next several years. Recent analysis by tech and telecom analyst Tim Farrar suggests that the Cisco Visual Networking Index: Global Mobile Data Forecast – a projection widely relied upon to predict the amount of newly licensed spectrum necessary to solve the alleged crunch – may overstate by more than 1200 times the total cellular data traffic to be expected in the year 2020.¹⁸ Farrar concludes that “a more realistic analysis” might show “that we don’t need to allocate more spectrum to accommodate future traffic or that unlicensed spectrum bands will be best suited to handle expected growth.”¹⁹

Our wireless ecosystem need a mixture of licensed and unlicensed spectrum across all spectrum bands, to allow for greater coverage with low-band frequencies and greater capacity with high-band frequencies. Calls to auction off as much spectrum as possible in the upcoming incentive auction, or to preclude availability of spectrum for unlicensed use in lower bands such as the 600 MHz band, fail to appreciate the technical and economic value of unlicensed use.

¹⁶ *In the Matter of Special Access for Price Cap Local Exchange Carriers*, Report and Order, WC Docket. No. 05-25, 27 FCC Rcd 10557, ¶ 1 (2012).

¹⁷ *Id.* ¶¶ 3-5.

¹⁸ See Tim Farrar, “Note to the telecom industry: Beware of false models,” *GigaOm*, Feb. 22, 2014, <http://gigaom.com/2014/02/22/note-to-the-telecom-industry-beware-of-false-models/>.

¹⁹ *Id.*

A study commissioned by the new WiFiForward coalition, which includes some of the largest cable and Internet companies, estimates the annual value of unlicensed spectrum to the U.S. economy at a figure of nearly \$230 billion in 2013 alone.²⁰ That study by Dr. Raul Katz recounts earlier ones estimating the annual value of unlicensed to the U.S. economy to be as “little” as \$16 billion per year in 2009, or \$50 billion per year in 2012. Wherever the number lies in that range, however, it is roughly equivalent to the value to the U.S. Treasury of the 700 MHz auction in 2008, as often as once a year (on the low end of the range) or once a month (on the high end).

The FCC Should Preserve Unlicensed in 600 MHz and Other Current Unlicensed Bands

These types of benefits show the wisdom of statements like Commissioner Rosenworcel’s last week, in her piece published by *re/code*. Commissioner Rosenworcel explained the benefits of growing unlicensed spectrum availability to grow the U.S. wireless economy – and the economy overall. She called for opening spectrum such as the 5 GHz band to greater unlicensed use, and the FCC has an ongoing proceeding for this band just as it has for the 3.5 GHz band. Commissioner Rosenworcel also called on the FCC “to use guard bands in the 600 megahertz spectrum now used by broadcasters [in order to] help extend the reach of Wi-Fi even further.”²¹

Free Press has joined other public interest groups, Internet innovators, and large cable companies in calling for continued unlicensed use of the 600 MHz band for unlicensed operations. That should include continued use of TV “white spaces” between broadcast channels even after the band is repacked for the incentive auction, along with unlicensed use of “technically reasonable” guard bands in the portion of the band reclaimed from TV broadcasters and ultimately devoted to wireless broadband. Free Press called for the preservation of at least 20 megahertz of contiguous spectrum for unlicensed use in the reconstituted band, joining stakeholders such as the National Cable Television Association and the Wireless Internet Service Providers Association.²²

CONCLUSION

An examination of the mobile wireless market in the United States shows that this vital sector exhibits a greater level of competition than some other telecommunications industries. Recent trends have been encouraging. Contrary to the opinions of some incumbent carriers, however, these signs of life are directly attributable in part to smart oversight and appropriate intervention by antitrust authorities and the Federal Communications Commission. Competition in the wireless market has improved *because of* – not in spite of – well-timed regulation. The Department of Justice should remain vigilant in its review of market structure. The FCC must continue to implement policies that give consumers greater control of devices, prevent spectrum concentration and other anticompetitive practices, and promote unlicensed use of spectrum.

²⁰See Raul Katz, Telecom Advisory Services, LLC, “Assessment of the Economic Value of Unlicensed Spectrum in the United States,” at 8 (Feb. 2014), <http://www.wififorward.org/wp-content/uploads/2014/01/Value-of-Unlicensed-Spectrum-to-the-US-Economy-Full-Report.pdf>.

²¹ Commissioner Jessica Rosenworcel, “Growing Unlicensed Spectrum, Growing the Wireless Economy,” *re/code*, Feb. 21, 2014, <http://recode.net/2014/02/21/growing-unlicensed-spectrum-growing-the-wireless-economy/>.

²² Reply Comments of Free Press, GN Docket No. 12-268, at 4 (file June 28, 2013).