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**Wireless Report Evidence of Effective Competition Contradicts
the FCC's Pro-Regulatory Agenda**

by

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Introduction and Summary

On September 23 the Federal Communications Commission released its [*Nineteenth Wireless Competition Report*](#). The report cites an abundance of data demonstrating the competitive and innovative state of the commercial mobile services market. In fact, report data evidencing effective competition in the mobile services market contradicts the Commission's pro-regulatory agenda. A federal wireless policy more in tune with actual market conditions would favor free market competition and less regulation than is currently the case. And it would promote overall consumer welfare.

There is clear and convincing evidence in the *Nineteenth Wireless Competition Report* that the commercial mobile services market is effectively competitive. Yet the *Nineteenth Report* declined to offer any answer to Section 332(c)'s directive that the Commission shall provide an analysis of "whether or not there is effective competition" in the commercial mobile services market. The Commission has dodged the congressional directive for the last six reports.

In defining "effective competition" under Section 332(c) of the Communications Act the Commission should give it the same meaning as "effective competition" under Section 623. The

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Commission should apply Section 623’s “competing provider” test to the commercial mobile services market. Coverage data indicating the number of competitors surely satisfies that test. As of December 2015, 99.7% percent of the U.S. population lived in census blocks with coverage by at least two commercial mobile service providers. Meanwhile, 97.9% lived in census blocks with coverage by at least three providers, and 93.4% lived in census blocks with four or more providers. With respect to mobile broadband, 95.9% of the population lived in census blocks with LTE network coverage provided by three or more wireless broadband providers as of December 2015, and 89.1% lived in census blocks with four or more providers offering LTE coverage.

There is also ample evidence of strong competition in the overall market for wireless mobile services. About 80% of mobile subscribers had a smartphone in the first quarter of 2016, up from about 77% in the third quarter of 2015. Meanwhile, monthly data usage per smartphone subscriber in 2015 averaged 2.9 GB per month – a 114% increase since the end of 2014. Increasing data use is also due to increased adoption of tablets, growth in streaming video, and faster networks. In addition, from 2014 to 2015, the annual Wireless Telephone Services CPI decreased by 3.8%.

In its *Effective Competition Order* (2015) the Commission established a rebuttable presumption that, on a nationwide basis, local cable markets are subject to effective competition. The Commission similarly should adopt a rebuttable presumption that there is effective competition for commercial mobile services markets in all areas. Then, it should demand actual evidence of market failure or consumer harm before it subjects commercial mobile services to any new regulation.

The *Nineteenth Report*, like its predecessor report, contains evidence that undermines the Commission’s gatekeeper and switching costs rationales for imposing common carrier-like regulation on mobile broadband services in the *Open Internet Order*. Effective market competition for commercial mobile services constitutes an important check against provider incentives or ability to engage in anti-competitive conduct. Also, the *Open Internet Order* deemed early termination fees (ETFs) “a significant factor in enabling the ability of mobile broadband providers to act as gatekeepers.” But term contract phase-out and ETF buyouts allow consumers to avoid or significantly reduce switching costs.

Competitive choice and rapid change in the mobile services market also offers reasons why the Commission shouldn’t seek to restrict free data mobile plans. At no extra cost, such plans offer consumers, especially including low-income consumers, added value such as unlimited streaming of popular music apps or access to social media apps that do not count against their monthly data allotments. The Commission ought to close its continuing inquiry into free data plans. U.S. leadership in this area is needed so that countries around the world are less likely to impose bans on *free* services and programs like Facebook’s Free Basics.

Repeating another regrettable pattern, the *Nineteenth Report* contains a lackluster two-paragraph take on intermodal competition. Yet the intermodal competition data that the report does cite indicates 48.3% of American homes had only wireless mobile phones. Surprisingly, the Commission has never expressly recognized that mobile voice services are a substitute for

wireline voice services. But with nearly half of all households wireless only, it is well past time to recognize wireless and wireline voice services are close substitutes.

Other data – not referenced in the *Nineteenth Report* – indicates that mobile broadband is increasingly serving as a close substitute for fixed broadband. Data collected by NTIA shows that the percentage of online households that relied exclusively on mobile service at home doubled between 2013 and 2015, from 10% to 20%. The Commission’s future reports should undertake a more searching analysis of intermodal competition.

There is reason to be concerned that regulation of mobile broadband services, imposed by the *Open Internet Order*, has had harmful effects on investment in mobile broadband infrastructure. The *Nineteenth Report* states: “Wireless service providers spent an incremental \$30.9 billion in 2015, which is a decline of approximately 3.2 percent from the \$31.9 billion invested in 2014.”

There is a correlation between the Commission’s decision to impose common carrier-like regulation on mobile broadband for the first time and declines in mobile broadband infrastructure investment for the first time. That correlation should not be dismissed lightly. Risk of deterrence to future investment in broadband infrastructure is also a primary reason why the Commission should drop its proposed privacy regulations. A less intrusive, more uniform alternative would be privacy regulatory enforcement by the Federal Trade Commission.

Similarly, proposed Commission rate regulation of TDM-based business data service (BDS) facilities risk reducing investment in wireless backhaul facilities. Revenue losses for incumbent BDS providers will reduce financial recourses for backhaul facilities upgrades necessary for future 5G capabilities. And mobile providers leasing backhaul facilities at below-market rates will be less likely to invest in their own backhaul facilities.

In sum, the *Nineteenth Wireless Competition Report* reveals effective competition in the mobile services market, a mismatch between actual market conditions and the rationale the Commission has posed for reclassifying mobile broadband as a Title II common carrier-like service, intermodal competitive effects that are becoming too obvious to ignore, and threats to mobile infrastructure investment from *Open Internet* and proposed broadband privacy regulations. By the time that the *Twentieth Report* is released, a newly constituted Commission must realign federal wireless policy with effectively competitive conditions and become more inclined toward free market competition than costly regulation that could harm mobile consumers.

There is Effective Competition in the Commercial Mobile Services Market

Section 332(c) of the Communications Act requires the FCC to annually prepare a report that includes an analysis of “whether or not there is effective competition” in the market for commercial mobile services. The [Nineteenth Wireless Competition Report](#) was prepared by the Wireless Telecommunications Bureau. (Contrary to former Chairman Julius Genachowski’s practice of submitting each report to the full Commission for approval, each of the wireless competition reports released during Chairman Tom Wheeler’s tenure has been released by the Bureau.)

There is clear and convincing evidence in the *Nineteenth Report* that the commercial mobile services market is effectively competitive. Particularly conclusive on this point is data indicating that, as of December 2015, 99.7% percent of the U.S. population lived in census blocks with coverage by at least two commercial mobile service providers, 97.9% lived in census blocks with coverage by at least three providers, and 93.4% lived in census blocks with four or more providers.

Of course, market share figures fail to capture the dynamism of the wireless ecosystem. But the *Nineteenth Report* contains ample evidence for concluding that there is effective competition in the overall market for wireless mobile services:

- “Over the past six years, wireless service providers in the United States have made capital investments of approximately \$177 billion.”
- Total mobile wireless connections grew from between 355-357 million in December 2014 to between 374-378 million in December 2015— an annual growth rate of 5%-6%;
- 95.9% of the population lived in census blocks with LTE network coverage provided by three or more wireless broadband providers as of December 2015, and 89.1% lived in census blocks with four or more providers offering LTE coverage;
- Consumer pricing options include both post-paid and prepaid service, with “[t]he four nationwide service providers offer prepaid service under their own prepaid brands,” in addition to mobile virtual network operators (MVNOs), “which then resell service on the nationwide networks under a variety of prepaid brands.” At the end of 2015, TracFone Wireless was the largest MVNO, with about 26 million subscribers.
- “According to CPI data, the price (in constant dollars) of wireless service has continued to decline. From 2014 to 2015, the annual Wireless Telephone Services CPI decreased by 3.8 percent while the overall CPI increased by 0.1 percent and the Telephone Services CPI fell by 1.8 percent.”
- Smartphone use has continued to increase, as “approximately 80 percent of all mobile subscribers had a smartphone in the first quarter of 2016,” up from about 77% in the third quarter of 2015, and way up from about 51% in the third quarter of 2012. Smartphone penetration rates among new mobile phone purchases stood at approximately 90 percent in the first quarter of 2016, up from about 88% in third quarter 2015, and up from approximately 67 percent in the third quarter of 2012.
- “Google Play offered approximately 2.2 million apps, and Apple App Store offered approximately 2 million apps as of June 2016.”

- “Monthly data usage per smartphone subscriber in 2015 averaged 2.9 GB per month, increasing approximately 114 percent since year-end 2014.” Other reports peg average smartphone consumer data usage between 3.5 and 4.5 MB per month. “This trend in increasing data use is due to multiple factors, including the increased adoption of smartphones and tablets, growth in streaming video, and the development of faster networks.”
- “[T]he number of American homes with only wireless telephones continues to grow.” As of December 2015, 48.3% of adults live in a household that is wireless-only and 57.7% of all children live in a wireless-only household.

Indeed, the dynamism of wireless ecosystem, highlighted in data summarized by the *Nineteenth Report*, reflects the underlying competitiveness of the commercial mobile services market.

All too predictably, the *Nineteenth Wireless Competition Report* declined to offer any answer to Section 332(c)’s directive that the Commission shall provide an analysis of “whether or not there is effective competition” in the commercial mobile services market. The Commission has dodged the question underlying its required analysis for the last six reports. By contrast, the *Eighth* through *Thirteenth Reports* concluded that there was effective competition in the market. On [prior occasions](#) I have maintained that Section 332(c) is best understood as requiring a “yes” or “no” finding.

Defining Effective Competition Under the Communications Act

Among its excuses for declining to make any finding, the Commission has insisted that no accepted definition of “effective competition” exists among antitrust authorities. But that excuse doesn’t cut it. Defining “effective competition” under Section 332(c) requires nothing more than that the Commission should apply normal canons of statutory construction. It’s a canon of statutory interpretation that each provision of the law is presumed to be of some effect and not treated as meaningless unless absolutely necessary. Another canon is that identical words used in different parts of the same act are intended to have the same meaning. In fact, Section 623 of the Communications Act uses the term “effective competition.” That section includes a “competing provider” test for ascertaining whether “effective competition exists” in video markets. The Commission can apply that test to the commercial mobile services market.

Based on an analogous application of the Section 623 competing provider test, data points concerning competing provider coverage demonstrate the existence of effective competition for nationwide commercial mobile services. Applied to the commercial mobile services, effective competition exists in a cellular marketing area if: (1) it is served by at least two competing mobile service providers, each of which offers mobile voice and broadband services to at least 50% of all area households; and (2) the number of subscribers other than the area’s largest provider exceeds 15 percent of area households.

As indicated earlier, as of December 2015, 99.7% percent of the U.S. population lived in census blocks with coverage by at least two commercial mobile service providers, 97.9% lived in census blocks with coverage by at least three providers, and 93.4% lived in census blocks with four or

more. Meanwhile, 97.9% lived in census blocks with coverage by at least three LTE providers, and 93.4% lived in census blocks with four or more LTE providers. While those competitor coverage figures are nationwide, they surely indicate the presence of at least two competing mobile service providers and lack of any dominant provider across all cellular marketing areas. The *Nineteenth Report* also cites provider coverage data by cellular marketing areas that clearly corroborate the nationwide figures. As of December 2015, 715 out of 716 areas were served by two or more mobile service providers with at least a 5% market share. And 557 areas were served by three or more providers possessing at least a 5% market share.

In its *Effective Competition Order* (2015) the Commission established a rebuttable presumption that local cable markets are subject to effective competition. The Commission should similarly adopt a rebuttable presumption that there is effective competition for commercial mobile services markets in all areas. It should thereby demand actual evidence of consumer harm before it subjects commercial mobile services to any new regulation.

Report Data Undermines *Open Internet Order*'s Rationale for New Regulation

Of course, the Commission did impose new regulation on commercial mobile services in its *Open Internet Order* (2015). However, the *Nineteenth Report*, like its predecessor report, contains evidence that undermines the Commission's gatekeeper and switching-costs rationales for imposing public utility-style regulation on mobile broadband services in the *Open Internet Order*.

Clearly, consumers continue to enjoy competitive choices among mobile service providers – which the *Open Internet Order* misguidedly downplayed. As indicated, 95.9% of population lived in census blocks with LTE network coverage provided by three or more wireless broadband providers in December 2015. Effective market competition for commercial mobile services constitutes an important check against provider incentives or ability to engage in anti-competitive conduct. By acting anti-competitively mobile service providers would lose subscribers to their competing rivals.

Also, “[s]tarting in 2013, as previously reported in the last two *Reports*, service providers have been promoting service plans without term contracts and equipment subsidies in favor of Equipment Installment Plans (EIPs).” The *Nineteenth Report* observed that in 2015, Sprint, Verizon, and AT&T all announced plans to phase out term contracts equipment subsidies. In addition, competing providers continue to offer ETF buyouts to encourage customers to switch from rivals. The *Open Internet Order* deemed ETFs “a significant factor in enabling the ability of mobile broadband providers to act as gatekeepers.” But term contract phase-out and ETF buyouts provide means for consumers to readily avoid or significantly reduce switching costs. In short, continuing trends in pricing options undermine the *Open Internet Order*'s analytical underpinnings for regulating mobile broadband services.

Continuing market trends in pricing also provide an important lesson: government shouldn't regulate dynamic markets. For a time, ETFs were a prime target for regulation. Pro-regulatory advocates called for bans on ETFs. In 2009 and 2010, the Commission conducted inquiries into ETF practices. However, term contracts with equipment subsidies and ETFs were pricing options that consumers were free to forego. Those contracts allowed consumers to avoid the up-front

costs of purchasing a device outright. In recognition of the dynamism of the mobile marketplace, I argued that [competition and choice offered the best check and balance](#) on carrier practices regarding ETFs. My concern was that regulation could deprive consumers of choices and stifle innovation. Flash forward to 2016, and competition has moved away from ETFs. This goes to show that ETFs never needed to be regulated.

The presence of competitive choice and rapid change in the mobile services market also offers reason why the Commission shouldn't seek to restrict "free data" mobile plans. At no extra cost, such plans offer consumers added value such as unlimited streaming of popular music apps or access to social media apps that do not count against a consumer's monthly allotment of mobile data. The *Nineteenth Report* expressly referenced Binge-On, T-Mobile's free data plan. As the report described, "In November 2015, T-Mobile announced that customers on qualifying rate plans would be able to stream unlimited video from participating video streaming services without using their data allowance." Although the *Open Internet Order* essentially recognized that free data plans could benefit consumers, the Commission has for months been conducting an inquiry into such plans. Given the choices consumers now enjoy in today's effectively competitive mobile services market – as well as the lack of any identifiable harm from free data – the Commission ought to close its inquiry. Decisive U.S. leadership in this area is needed so that countries around the world are less likely to impose bans on free data services and programs like Binge-On and Facebook's Free Basics.

Indeed, the dynamism of the mobile service market – reflected in the coming and going of ETFs and the availability of free data plans – calls for a broader policy presumption that the wireless market is effectively competitive. The burden should be placed on parties demanding regulation of this fast-changing market. This would better ensure that important questions – such as whether actual harm exists in the market and whether regulation would offer more benefits than costs – are carefully considered before government imposes restrictions on the mobile services market that are of dubious value and that last long after their ostensible reason for being.

Report Fails to Take Intermodal Competition Seriously

Repeating another regrettable pattern, the *Nineteenth Report* contains a lackluster two-paragraph take on intermodal competition. Those paragraphs repeat nearly verbatim all that was contained about intermodal competition in its predecessor report. This includes the Commission's reference to Centers for Disease Control (CDC) survey numbers on wireless substitution, "which we emphasize only pertains to voice services and therefore no inferences regarding broadband services can, or should, be drawn based upon it." According to the CDC, in the second half of 2015, 48.3% of American homes had only wireless mobile phones. The Commission has never expressly recognized that mobile voice services are a substitute for wireline voice services. With nearly half of all households wireless only, it is well past time to recognize wireless and wireline voice services are close substitutes.

Of course, one need not draw supposedly forbidden inferences about mobile broadband services from CDC wireless substitution numbers. Other data – not referenced in the *Nineteenth Report* – indicate that mobile broadband is increasingly serving as a close substitute for fixed broadband. On April 19, 2016, Giulia McHenry, Chief Economist in the Office of Policy Analysis and

Development at NTIA, observed: “Mobile Internet service appears to be competing more directly with wired Internet connections.” More specifically, data collected by NTIA “shows that the proportion of online households that relied exclusively on mobile service at home doubled between 2013 and 2015, from 10 percent to 20 percent.” The growth in households that have wireless-only access to broadband services “appears to have come at the expense of wired broadband connections.” The fact that such publicly available information was not contained in the *Nineteenth Report* indicates a lack of seriousness concerning intermodal competition. At the very least, the Commission’s future reports should undertake a more searching analysis of competition between mobile and fixed platforms.

FCC Regulation Causing Declines in Investment in Mobile Network Investment?

There is reason to be concerned that regulation of mobile broadband services, imposed by the *Open Internet Order*, has had harmful effects on investment in mobile broadband infrastructure. The *Nineteenth Report* indicates: “Wireless service providers spent an incremental \$30.9 billion in 2015, which is a decline of approximately 3.2 percent from the \$31.9 billion invested in 2014. Based on UBS data, AT&T, Sprint, T-Mobile, and Verizon Wireless spent a combined \$30.3 billion in 2015 and \$31.2 billion in 2014.” The report downplayed that decline. Among other things, it insisted that capital expenditures at any given time “will not provide the full picture of a service provider’s investment strategy given the cyclical nature of such investments.”

Indeed, the importance of communications sector investment to our economy was brought into sharper focus by Michelle Di Ionna and Michael Mandel’s report, “[Investment Heroes 2016: Fighting Short-termism](#),” The October 2016 paper, published by the Progressive Policy Institute, tracked the top 25 companies – or “Investment Heroes” – based on their estimated domestic investments over the past fiscal year. According to Di Ionna and Mandel, “America’s weakness in capital spending is all too real.” However, similar to 2014, in 2015 “the top ‘Investment Hero’ industries were telecom and cable providers.” Thus, any reduction in investment by the communications sector is of critical importance to America’s overall economy. This is especially the case when it comes to mobile service providers, since AT&T and Verizon ranked as the top two Investment Hero companies. For 2015, AT&T and Verizon investments were estimated at \$18.7 and \$16.5 billion, respectively.

As Di Ionna and Mandel observe in their report, AT&T, Verizon, Comcast, and Time Warner Cable – all ranked in the top 25 – “cut U.S. capital spending by 1.3 percent in 2015 as compared to 2014.” They estimate that AT&T’s capital expenditure was down by 11.6 percent as compared to the previous year.” And although Verizon increased its expenditures for wireless operations in 2015 in order to upgrade its 4G LTE network capacity, “this rise in investment was largely offset by a decrease in their wireline segment capital spending.” Verizon’s overall investment thereby increased only 3.4% compared to the prior year. Moreover, “AT&T reduced capital investments by 16.7 percent in the first half of 2016 as compared to the first half of 2014. And, for Verizon, the decrease is 14.4 percent.”

Di Ionna and Mandel deem it too soon to draw direct connections between new FCC regulatory initiatives and communications sector spending declines. Yet they concede “it seems possible that the prospect of continued regulatory upheavals – including the potential for rate regulation – is influencing capital investment in the U.S.”

Recent declines in communications sector investment – including mobile network investment – may not be due solely to the *Open Internet Order*’s reclassification of mobile broadband services as a Title II regulated service. Yet, there is a correlation between the Commission’s decision to impose common carrier-like regulation on mobile broadband for the first time and declines in mobile broadband infrastructure investment for the first time. That correlation should not be taken lightly. We ought not take it for granted that subjecting mobile broadband services to new regulations will have no detrimental impact on investment. Nor ought we take it for granted that the Commission’s proposed privacy regulations – which apply to mobile broadband providers – would have no impact on investment. Indeed, the risk of deterrence to future investment in broadband infrastructure is one of the primary reasons why the Commission should drop its proposed privacy regulations. Given the absence of any market power problem or actual instances of consumer harm in the area of online privacy, and given the alternative less intrusive and more uniform option of privacy regulatory enforcement by the Federal Trade Commission, the far better course is for the FCC to decline to go forward with its regulatory proposal.

Similarly, proposed Commission rate regulation of TDM-based business data service (BDS) facilities risk diminishing private sector investment in wireless backhaul facilities that carry mobile voice and data traffic from cell towers to provider networks. Revenue losses for BDS providers will reduce the amount of capital available for fiber and Ethernet backhaul facilities upgrades. Such upgrades are indispensable to supporting future 5G capabilities. And mobile providers that lease backhaul facilities at below-market rates established by the Commission will have reduced incentives to invest in their own backhaul facilities.

Conclusion

The *Nineteenth Wireless Competition Report* reveals effective competition in the commercial mobile services market. A review of the report’s data shows a mismatch between competitive conditions in the market and the rationale the Commission has proffered for reclassifying mobile broadband as a Title II common carrier-like service. Report data also shows intermodal competitive effects that are becoming too obvious to ignore, as well as threats to mobile infrastructure investment from *Open Internet* and proposed broadband privacy regulations. The Commission’s pro-regulatory agenda is contradicted by the evidence of effective competition in the mobile services market. A newly constituted Commission must realign federal wireless policy with effectively competitive conditions in the mobile services market. Federal wireless policy ought to become more inclined toward free market competition than costly regulation that could harm mobile consumers.

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Further Readings

Seth L. Cooper and Michael J. Horney, "[The FCC's Internet Access Report Ignores Broadband Market Realities](#)," *Perspectives from FSF Scholars*, Vol. 11, No. 31 (August 26, 2016).

[Comments of the Free State Foundation](#), Protecting the Privacy of Customers of Broadband and Other Telecommunications Services, WC Docket 16-6 (May 31, 2016).

Michael J. Horney, "[Zero-Rating Promotes Upward Mobility for Minority and Low-Income Consumers](#)," *FSF Blog* (May 13, 2016).

Seth L. Cooper, "[Wireless Report Data Undermine the FCC's Rationale for Regulation](#)," *Perspectives from FSF Scholars*, Vol. 11, No. 5 (January 22, 2016).

Randolph J. May and Michael J. Horney, "[Mobile Broadband is a Substitute for Fixed Broadband](#)," *FSF Blog* (January 14, 2016).

[Comments of the Free State Foundation](#), Annual Report and Analysis of Competitive Market Conditions with Respect to Mobile Wireless, Including Commercial Mobile Services, WT Docket No. 15-125 (June 29, 2015).

Seth L. Cooper, "[FCC Should Be Clear and Consistent on Effective Competition in the Wireless Market](#)," *Perspectives from FSF Scholars*, Vol. 10, No. 21 (June 22, 2015).

Randolph J. May, "[Dealing Effectively With Effective Competition](#)," *FSF Blog* (April 17, 2015).

Seth L. Cooper, "[FCC Should Adopt the Deregulatory Proposal for Local Cable Rates](#)," *Perspectives from FSF Scholars*, Vol. 10, No. 15 (April 9, 2015).

Seth L. Cooper, "[Convergent Market Calls for Serious Intermodal Competition Assessments](#)," *Perspectives from FSF Scholars*, Vol. 8, No. 12 (May 2, 2013).

Seth L. Cooper, "[FCC Report Reconfirms the Reality of Wireless Innovation and Competition](#)," *FSF Blog* (March 27, 2013).

Seth L. Cooper, "[Fairly Disclosing ETFs vs. Price-Regulating ETFs](#)," *FSF Blog* (December 10, 2009).

Seth L. Cooper, "[Let Competition and Choice Check Wireless ETFs](#)," *Perspectives from FSF Scholars*, Vol. 4, No. 20 (December 8, 2009).