TECH FREEDOM

September 27, 2019

Scott Scheele Chief, Telecommunications and Broadband Section Antitrust Division, U.S. Department of Justice 450 Fifth Street NW, Suite 7000 Washington, D.C. 20530

Re: United States of America v. Deutsche Telecom AG, T-Mobile US, Inc., Softbank Group Corp., and Sprint Corp., et al., Case 1:19-cv-02232 Comments of TechFreedom

Dear Mr. Scheele:

On behalf of TechFreedom,¹ and in response to the procedures set forth in the Antitrust Procedures and Penalties Act, 15 U.S.C. § 16(b)-(h) (the "APPA" or "Tunney Act"), we file these comments in support of the proposed Final Judgment and Stipulation and Order (the "Measures") in the above-reference case.

We urge the Court to approve these Measures and the proposed transaction between T-Mobile U.S., Inc. and Sprint Corporation because the combined company, New T-Mobile, will be in a far better position to deploy wireless services to all Americans than would either company alone. In terms of the number of companies able to deploy the expensive 5G networks that consumers of the future will demand, and to extend service to currently unserved rural areas, this is not a 4-to-3 merger but a 2-to-3 merger.

While we believe that the Measures actually go too far in their alleged attempt to protect competition under Section 7 of the Clayton Act, 15 U.S.C. § 18, (especially the requirement of the creation of a "new" fourth carrier in DISH), in light of the parties' agreement to the Measures, TechFreedom believes that the quickest path to bringing forth the benefits of the merger is for the court to approve the merger as agreed.

We agree with the recent analysis conducted by the International Center for Law & Economics entitled "A Review of the Empirical Evidence on the Effects of Market Concentration and

¹ TechFreedom is a non-partisan think tank dedicated to promoting the progress of technology that improves the human condition. To this end, we seek to advance public policy that makes experimentation, entrepreneurship, and investment possible, and thus unleashes the ultimate resource: human ingenuity. Wherever possible, we seek to empower users to make their own choices online and elsewhere.

Mergers in the Wireless Telecommunications Industry."² In the ICLE Study, the authors reviewed 18 empirical analyses of mergers within the wireless industry across the world. Their conclusions are worth noting:

Of those studies that considered the effect on investment in 4-to-3 mergers, all found that capital expenditures, a proxy for investment, increased post-merger.

Several recent studies that looked more broadly at the effects of market concentration in the mobile telecommunications industry indicate that the highest levels of country-wide investment occurred in markets with three facilities-based operators (though total investment was not significantly lower in markets with four facilities-based operators). In addition, a recent analysis found that U.S. markets with higher concentration of ownership of spectrum had faster, more reliable cellular service.

Studies of investment also found that markets with three facilities-based operators had significantly higher levels of investment by individual firms. The implication is that in such markets, individual firms have stronger incentives to invest in the infrastructure that supports the range, quality, and quantity of services provided to consumers. Studies also suggest this effect may be strengthened when the merger results in a market structure that is more symmetrical (i.e. the various facilities-based providers become more equal in market share).

From an investment perspective, the optimal number of wireless firms in a given market appears, in some studies, to be three; however, in some jurisdictions (such as those that are more densely populated), the optimal number may well be four, while in others (such as those with small populations that are widely dispersed) the optimal number may well be two. Regardless, there is little or no support for categorically claiming that the optimal number of firms in larger jurisdictions, or indeed in any jurisdiction, is four.

When evaluating the merits of a merger, authorities are charged with identifying the effects on the welfare of consumers. On the basis of the studies that we review, 4-to-3 mergers appear to generate net benefits to consumer welfare in the form of increased investment, while the effects on price are inconclusive.³

These findings are consistent with the comments TechFreedom filed at the FCC, which we attach hereto. These findings also undercut the conclusions reached in the Justice Department's

² E. Fruits, J. Hurwitz, G. Manne, J. Morris & A. Stapp, A Review of the Empirical Evidence on the Effects of Market Concentration and Mergers in the Wireless Telecommunications Industry, ICLE (Sept. 09, 2017), [hereinafter "ICLE Study"], available at https://laweconcenter.org/wp-content/uploads/2019/09/ICLE-Telco Merger Lit Review Jud Rpt FINAL.pdf.

³ Id. at 2-3.

Competitive Impact Statement, filed in this case.⁴ There, the Justice Department determined that: "The elimination of a fourth national facilities-based mobile wireless carrier would remove competition from Sprint and restructure the retail mobile wireless service market. The combination of T-Mobile and Sprint would eliminate head-to-head competition between the companies and threaten the benefits that customers have realized from that competition in the form of lower prices and better service." ⁵

Both the ICLE Study and our comments to the FCC dispute this finding, based on the fact that a combined T-Mobile/Sprint will be in a much better position to compete with the dominant carriers AT&T and Verizon on both price and service. More importantly, when it comes to investing in 5G, the merged entity will be in a far better position, both in terms of economics and current combined spectrum assets, to compete in that "race." Indeed, the Measures may, in fact, slow or otherwise impede the ability of the merged entity to deploy 5G technologies, which the FCC has concluded is vital to the public interest and consumer welfare under the Communications Act.⁶

In perhaps no other industry are the economies of scale larger than in broadband, and wireless broadband in particular.⁷ Indeed, American wireless broadband companies have long been the leading capital investors in America.⁸

Nor is there any indication that the merged entity will somehow drive up prices for consumers, when there continues to be a downward pressure on consumer prices in the market. The best indicators of the competitiveness of the wireless market are price and quality. The FCC's most recent wireless competition report notes that "it is difficult to compare prices of mobile wireless service plans because providers offer a variety of plans, frequently under multipart pricing

⁴ *United States v. Deutsche Telekom AG*, No. 1:19-cv-02232-TJK (D.D.C., July 26, 2019) ("Competitive Impact Statement"), *available at* https://www.justice.gov/opa/press-release/file/1189336/download.

⁵ Id. at 7.

⁶ Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment, WT Docket No. 17-79, 33 FCC Rcd. 7705 (Aug. 3, 2018), available at https://docs.fcc.gov/public/attachments/FCC-18-111A1.pdf; see also The FCC's 5G FAST Plan, FCC.gov, https://www.fcc.gov/5G (last visited Sept. 26, 2019). ("Forward-thinking spectrum policy, modern infrastructure policy, and market-based network regulation form the heart of our strategy for realizing the promise of the 5G future," FCC Chairman Ajit Pai).

⁷ See, e.g., Aswath Damodaran, Capital Expenditures by Sector (US), N.Y.U. Stern School of Business (last updated Jan. 2019), available at

http://pages.stern.nyu.edu/~adamodar/New Home Page/datafile/capex.html.

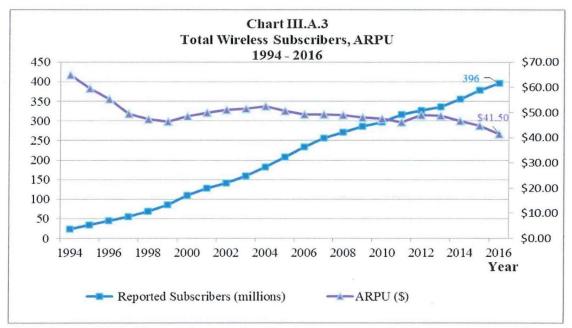
⁸ See J.B. Maverick, Which Types of Industries Have the Largest Capital Expenditures, INVESTOPEDIA (last updated Sept. 9, 2018), available at

https://www.investopedia.com/ask/answers/020915/which-types-industries-have-largest-capital-expenditures.asp, ("The companies that consistently have the largest capital expenditures are naturally those with operations that ongoing investments in expensive items, such as land, facilities, infrastructure and major manufacturing equipment. Energy companies and telecommunications firms traditionally top the list.").

schemes, which also vary in non-price terms and features, such as early termination fees and the consequences of reaching usage limits." Instead, the Report notes:

Average Revenue Per Unit [(ARPU)] can be used as a reasonable proxy for understanding pricing changes, particularly where there are multiple pricing plans and/or pricing structures are complicated as is the case for mobile wireless services." As shown in Chart III.A.3 below, according to CTIA, the *industry ARPU fell sharply during 2016 from \$44.65 to \$41.50, a decline of approximately 7 percent.* Recent changes by service providers, such as the removal of overage charges, the move toward unlimited data plans, and EIPs have all contributed to the reported decline in ARPU. ¹⁰

The chart below shows that, *despite* the "increased concentration" complained about by petitioners, overall wireless prices have continued to fall over the past 25 years:¹¹



Source: Based on CTIA Wireless Industry Indices Year-End 2016. Appendix III: Elements of Inter-Firm Rivalry, Table III.A.ii provides more detail.

The fact that prices (using the ARPU as a proxy) fell by 7% from 2015 to 2016 tells us far more about the competitiveness of this market than any HHI measure ever could. Indeed, the

⁹ 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, Twentieth Report, WT Docket No. 17-69, 32 FCC Rcd. 8968, ¶ 57 (Sept. 27, 2017), [hereinafter "Twentieth Report"], available at https://www.fcc.gov/document/fcc-releases-20th-wireless-competition-report-0.

¹⁰ Id. ¶ 59 (emphasis added).

¹¹ Id.

Department of Justice has previously acknowledged that such measures fail to assess the competitiveness of broadband markets:

We do not find it especially helpful to define some abstract notion of whether or not broadband markets are "competitive." Such a dichotomy makes little sense in the presence of large economies of scale, which preclude having many small suppliers and thus often lead to oligopolistic market structures. The operative question in competition policy is whether there are policy levers that can be used to produce superior outcomes, not whether the market resembles the textbook model of perfect competition.¹²

Finally, while much has been made of T-Mobile's self-created image as a "maverick" in the industry, in its Public Interest Statement filed at the FCC in support of the merger, the company itself has attributed its success in recent years not to the price-cutting moves, or offerings like unlimited data, but to the company's 2013 merger with MetroPCS:

T-Mobile's Un-carrier strategy has worked, but it alone is not enough to overcome the scale and spectrum advantages of Verizon and AT&T. While T-Mobile has gained some market share, those gains have amounted to only a few percentage points after five years of continuous aggressive implementation of its Un-carrier strategy. And, much of that gain is attributable to its successful acquisition and integration of MetroPCS, rather than taking share through organic gains in the marketplace.¹³

This candid statement reveals, once again, the importance of scale: allowing T-Mobile to acquire MetroPCS made the two companies worth more than the sum of their parts. Just as that combination served the public interest well, there is every reason to think this one will too.

In terms of extending service into rural America, the merger will enhance that national goal, not deter it. Currently T-Mobile and Sprint offer no service or spotty service to compete with Verizon and AT&T in much of rural America. The merger thus would actually be a 2-to-3 merger. In delivering a wireless home broadband service comparable to existing wired service, this merger may be a 1-to-2 merger, if not a 2-to-3 merger. Both Verizon and AT&T have announced plans for limited 5G deployments that rely heavily on their millimeter wave spectrum. The propagation characteristics of this spectrum mean that Verizon's and AT&T's planned deployments will focus on high density areas. New T-Mobile's plans for a nationwide 5G network, which will not rely on millimeter wave spectrum, will be easier to deploy in rural areas. T-Mobile's demonstrated

¹² Ex Parte Submission from U.S. Dept. of Justice, *Economic Issues in Broadband Competition: A National Broadband Plan for Our Future*, GN Docket No. 09-51, at 11 (Jan. 4, 2010), *available at* http://www.justice.gov/atr/public/comments/253393.pdf.

¹³ See T-Mobile and Sprint Description of Transaction, Public Interest Statement, and Related Demonstrations, WT Docket No. 18-197 at 98 (filed June 18, 2018), [hereinafter "Public Interest Statement"], available at https://newtmobile.com/wp-content/uploads/2018/06/T-Mobile-Sprint-Public-Interest-Statement.pdf.

¹⁴ Id. at 102.

commitment to lower pricing would serve consumers directly, while also forcing Verizon and AT&T, which have long had superior networks, to accelerate and expand their 5G deployment plans and quickly lower prices.¹⁵

Furthermore, T-Mobile and Sprint say the new network enabled by the merger will support "... a robust wireless broadband solution for residential use that will have equipment, service packages, and products matching or exceeding those of traditional ...in-home wired broadband providers." This service will support high definition and 4K video streaming, making the service an alternative to existing, wired broadband providers. This will allow New T-Mobile to compete not just with AT&T and Verizon, but also with cable and telco companies.

There is ample reason to believe this transaction will serve the public interest — and, indeed, plenty of reason to fear that, without this transaction, T-Mobile and Sprint will fall further and further behind market leaders AT&T and Verizon. Blocking this merger, or placing any further conditions on it, would deny American consumers the benefits of having three, rather than two, strong players in the market for wireless services. For all these reasons, the transaction should be approved — and the sooner, the better for consumers. Delay will only cost New T-Mobile money and, perhaps even more importantly, time; the company will need both if it is to catch up, and perhaps even surpass Verizon and AT&T.

Respectfully submitted,

TECHFREEDOM

By:	/s/	

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¹⁵ Id. at 50, 102.

¹⁶ Id. at 60.

¹⁷ Id. at 59.

Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC 20554

In the Matter of)	
Applications of T-Mobile U.S., Inc. and)	WT Docket No. 18-197
Sprint Corporation for Consent to Transfer)	
Control of Licenses and Authorizations)	
)	
To: Wireless Telecommunications Bureau)	

COMMENTS OF TECHFREEDOM

TechFreedom,¹ pursuant to Sections 1.415 and 1.419 of the Commission's rules (47 C.F.R. §§ 1.415 & 1.419), submits these Comments in the above-referenced proceeding in response to the Commission's Public Notice of July 18, 2018.² We urge the Commission to approve the proposed transaction between T-Mobile U.S., Inc. and Sprint Corporation because the combined company, New T-Mobile, will be in a far better position to deploy wireless services to all Americans than would either company alone. In terms of the number of companies able to deploy the expensive 5G networks that consumers of the future will demand,

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² T-Mobile US, Inc., and Sprint Corporation Seek FCC Consent to the Transfer of Control of the Licenses, Authorizations, and Spectrum Leases Held by Sprint Corporation and its Subsidiaries to T-Mobile US, Inc., and the *Pro Forma* Transfer of Control of the Licenses, Authorizations, and Spectrum Leases Held by T-Mobile US, Inc. and its Subsidiaries, WT Docket No. 18-197, Public Notice, DA 18-740 (rel. July 18, 2018). The Public Notice established September 17, 2018 as the filing date for Oppositions to Petitions to Deny. *Id.* These Comments serve as an opposition to the various petitions to deny which were filed by Common Cause, Consumers Union, New America's Open Technology Institute, Public Knowledge, & Writers Guild of America, West, Inc. and American Antitrust Institute and are timely filed. *See infra* note 7.

and to extend service to currently unserved rural areas, this is not a 4-to-3 merger but a 2-to-3 merger.

I. Consumer Welfare Is Lodestar for Merger Review

Sections 214(a) and 310(d) of the Communications Act command the Commission to determine whether applicants have demonstrated that the proposed transfers of control of licenses and authorizations will serve the public interest, convenience, and necessity.³ The Commission has explained its analysis as follows:

Our public interest evaluation necessarily encompasses the "broad aims of the Communications Act," which include, among other things, a deeply rooted preference for preserving and enhancing competition in relevant markets, accelerating private sector deployment of advanced services, promoting a diversity of license holdings, and generally managing the spectrum in the public interest. Our public interest analysis may also entail assessing whether the proposed transaction will affect the quality of communications services or will result in the provision of new or additional services to consumers. In conducting this analysis, we may consider technological and market changes, and the nature, complexity, and speed of change of, as well as trends within, the communications industry.

Our competitive analysis, which forms an important part of the public interest evaluation, is informed by, but not limited to, traditional antitrust principles. The Commission and DOJ each have independent authority to examine the competitive impacts of proposed communications mergers and transactions involving transfers of Commission licenses, but the standards governing the Commission's competitive review differ somewhat from those applied by DOJ. Like DOJ, the Commission considers how a transaction will affect competition by defining a relevant market, looking at the market power of incumbent competitors, and analyzing barriers to entry, potential competition and the efficiencies, if any, that may result from the transaction. The Antitrust Division of DOJ, however, reviews telecommunications mergers pursuant to section 7 of the Clayton Act, which prohibits mergers that may substantially lessen competition. The Antitrust Division's review is also limited solely to an examination of the

³ 47 U.S.C. § 214(a); 47 U.S.C. § 310(d).

competitive effects of the acquisition, without reference to diversity, localism, or other public interest considerations. The Commission's competitive analysis under the public interest standard is somewhat broader, for example, considering whether a transaction will enhance, rather than merely preserve, existing competition, and takes a more extensive view of potential and future competition and its impact on the relevant market.⁴

We have previously urged the Commission to define its competition analysis to be entirely consistent with the well-established standards of antitrust law. We believe that harmonization of these standards will serve the public interest by providing a clear analytical framework for merger review — with the FCC adding its own industry-specific expertise to the review performed by either the Department of Justice (DOJ) or the Federal Trade Commission (FTC). Harmonization will also minimize the potential for arbitrary or politicized enforcement, or, most importantly, for the Commission to engage in a kind of regulatory blackmail by refusing to grant approval of a merger until the parties assent to "volunteering" some condition that may have little, if any, connection to the transaction, and that the Commission might not be able to require by regulation, either because it lacks the statutory authority to do so or even because such a condition might be unconstitutional. This merger would be an excellent

⁴ Applications of Cellco Partnership d/b/a Verizon Wireless and Atlantis Holdings LLC For Consent to Transfer Control of Licenses, Authorizations, and Spectrum Manager and De Facto Transfer Leasing Arrangements and Petition for Declaratory Ruling that the Transaction is Consistent with Section 310(b)(4) of the Communications Act, Memorandum Opinion and Order and Declaratory Ruling, File Nos. 0003463892, et al., WT Docket No. 08-95 ¶¶ 27-28 (Nov. 10, 2008), https://docs.fcc.gov/public/attachments/FCC-08-258A1.pdf.

⁵ Comments of CEI & TechFreedom, *In the Matter of Commission Launches Modernization of Media Regulation Initiative*, MB Docket No. 17-105 at 7 (July 5, 2017), http://docs.techfreedom.org/TF CEI Comments FCC Media Modernization.pdf.

⁶ See Letter from Berin Szóka, President, TechFreedom & Geoffrey Manne, Exec. Director, Int'l Center for Law & Econ. to Members of the House of Representatives' Energy and Commerce Committee (May 20, 2015),

http://docs.techfreedom.org/TF ICLE Letter FCC Process Reform 5.20.15.pdf.

opportunity for the Commission to clarify its merger review standards, ideally by issuing a policy statement accompanying the decision on the merger.

But whether the Commission's analysis of the competitive effects of a transaction is "somewhat broader" than that of the antitrust laws, or exactly the same as the antitrust laws, the outcome of this review should be the same. Either way, the Commission's focus should be on whether the transaction will enhance consumer welfare — and this transaction clearly will. Many of the arguments raised by Petitioners simply fall outside the consumer welfare standard, even under the somewhat more expansive form of that standard articulated by the Commission in the past.

II. Petitioners Understate the Competitiveness of the Wireless Market

Petitioners make two central claims: (1) that the market is heavily concentrated today, (a) because it features only four nation-wide carriers, and (b) because the Herfindahl-Hirschman Index (HHI) measures for the industry today are high; and (2) that the merger will only increase that concentration, (a) reducing the market from four to three players and (b) raising HHI scores even higher. None of these claims in any way measures consumer welfare, which should be the sole focus for the Commission's inquiry. Under any circumstance, these static measurements are rough proxies for consumer welfare; but in a market such as that for wireless services, these proxies are fundamentally misleading.

⁷ See, e.g., Petition to Deny of Common Cause, Consumers Union, , Applications of T-Mobile US, Inc. and Sprint Corporation for Consent to Transfer Control of Licenses and Authorizations, WT Docket No. 18-197 (Aug. 27, 2018), https://tinyurl.com/ya64tj34 [hereinafter Public Knowledge, Petition to Deny]; Petition to Deny of the American Antitrust Institute, WT Docket No. 18-197 (Aug. 27, 2018), https://tinyurl.com/y8aob6qm [hereinafter AAI Petition].

⁸ Some issues with using static measures, such as HHI, include (1) HHI is somewhat arbitrary and not really tied to consumer welfare in any way, and (2) market power might not necessarily be driven by market share. See, e.g., Craig M. Newmark, Ass. Professor of Economics, N.C. State University, Price-Concentration Studies: There You Go Again, Prepared for the DOJ/FTC Merger

A. Static Measures of Market Concentration Are Poor Indicators of the Competitiveness of the Market

Even the Obama Administration's Department of Justice conceded that static measures of the competitiveness of a market mean little in markets with high fixed costs, such as — indeed, *specifically* referencing — that for wireless services. In 2010, when the FCC sought comment on how to analyze the broadband market for purposes of crafting the National Broadband Plan, the DOJ said the following:

We do not find it especially helpful to define some abstract notion of whether or not broadband markets are "competitive." Such a dichotomy makes little sense in the presence of large economies of scale, which preclude having many small suppliers and thus often lead to oligopolistic market structures.¹⁰

Workshop "Concentration and Market Shares" panel (Feb. 14, 2004), https://www.justice.gov/sites/default/files/atr/legacy/2007/08/30/202603.pdf ("Differences in market size could induce a positive price-concentration relationship, but as with competitive superiority, a price concentration relationship resulting from this cause does not imply consumers are being harmed. Market size differences may well account for the observations that the FTC attributed to non-competitive behavior in *Staples*.").

⁹ See Ex Parte Submission of the United States Department of Justice, In re Economic Issues in Broadband Competition, GN Docket No. 09-51 (Jan. 4, 2010), available at http://www.justice.gov/atr/public/comments/253393.pdf

¹⁰ *Id.* at 11. That filing does go on to note, in the next sentence, that "The operative question in competition policy is whether there are policy levers that can be used to produce superior outcomes, not whether the market resembles the textbook model of perfect competition. In highly concentrated markets, the policy levers often include: (a) *merger control policies*; (b) limits on business practices that thwart innovation (e.g., by blocking interconnection); and (c) public policies that affirmatively lower entry barriers facing new entrants and new technologies." *Id.* But this does not make change the fundamental point: even in applying "merger control policies," whatever static, simplistic measurements tell us about mergers in industries with lower economies of scale (and economies of scale) for consumer, they are far less useful — if useful at all — in industries like wireless service. *Id.*

In perhaps no other industry are the economies of scale larger than in broadband, and wireless broadband in particular.

Indeed, American wireless broadband companies have long been the leading capital investors in America.

America.

The best indicators of the competitiveness of the wireless market are price and quality. The FCC's most recent wireless competition report notes that "it is difficult to compare prices of mobile wireless service plans because providers offer a variety of plans, frequently under multipart pricing schemes, which also vary in non-price terms and features, such as early termination fees and the consequences of reaching usage limits." Instead, the Report notes:

Average Revenue Per Unit [(ARPU)] can be used as a reasonable proxy for understanding pricing changes, particularly where there are multiple pricing plans and/or pricing structures are complicated as is the case for mobile wireless services." As shown in Chart III.A.3 below, according to CTIA, the *industry ARPU fell sharply during 2016 from \$44.65 to \$41.50, a decline of approximately 7 percent.* Recent changes by service providers, such as the removal of overage charges, the move toward unlimited data plans, and EIPs have all contributed to the reported decline in ARPU. 14

¹¹ See, e.g., Aswath Damodaran, Capital Expenditures by Sector (US), N.Y.U. Stern School of Business (last updated Jan. 2018),

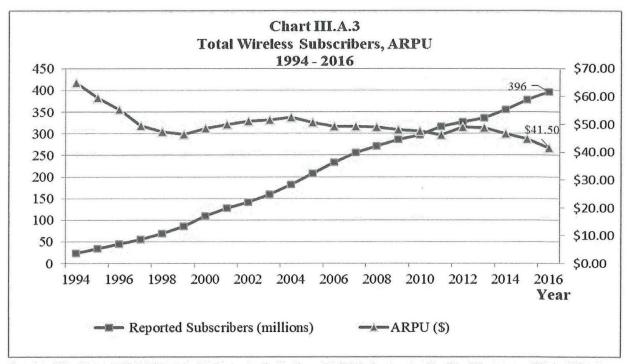
http://pages.stern.nyu.edu/~adamodar/New Home Page/datafile/capex.html.

¹² See J.B. Maverick, Which types of industries have the largest capital expenditures, INVESTOPEDIA (last updated Sept. 9, 2018), https://www.investopedia.com/ask/answers/020915/which-types-industries-have-largest-capital-expenditures.asp ("The companies that consistently have the largest capital expenditures are naturally those with operations that ongoing investments in expensive items, such as land, facilities, infrastructure and major manufacturing equipment. Energy companies and telecommunications firms traditionally top the list.").

¹³ 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, Twentieth Report, WT Docket No. 17-69, ¶ 57 (Sept. 27, 2017), https://www.fcc.gov/document/fcc-releases-20th-wireless-competition-report-0 [hereinafter "Twentieth Report"].

¹⁴ Id. ¶ 59 (emphasis added).

That chart shows that, *despite* the "increased concentration" complained about by petitioners, overall wireless prices are clearly falling:¹⁵



Source: Based on CTIA Wireless Industry Indices Year-End 2016. Appendix III: Elements of Inter-Firm Rivalry, Table III.A.ii provides more detail.

The fact that prices (using the ARPU as a proxy) fell by 7% from 2015 to 2016 tells us far more about the competitiveness of this market than any HHI measure ever could.

B. T-Mobile as a "Maverick": Incentives and Ability to Deliver *on the Margin*

Many opponents of the proposed merger argue that New T-Mobile will have less of an incentive to force down prices, offer innovative service plans (like unlimited data), *etc.*Specifically, the Public Knowledge's Petition to Deny asserts that Verizon and AT&T have been held in check from raising prices on and limiting data to consumers because competitors T-

15 Id.

Mobile and Sprint "aggressively marketed unlimited data plans." While opponents of the merger claim that this was due to the fact that there were four competitors in the market, there is nothing in their quoted or cited evidence that required either (a) a fourth competitor to prompt AT&T and Verizon to return to offering unlimited data plans, or (b) that the number three competitor be *less than half* the size of the two larger companies to have sufficient incentive to make such a "maverick" move.¹⁷

Indeed, as the T-Mobile Public Interest Statement makes clear, ¹⁸ New T-Mobile would have an increased footprint and greater ability to expand further into areas currently dominated by Verizon and AT&T to enhance competition in those geographic areas. They will also still have a strong incentive to attempt to lure customers away from AT&T and Sprint. According to T-Mobile's Public Interest Statement, the pre- and post-merger market shares would be as follows: ¹⁹

Pre-Merger	Market Share (percent)	Post- Merger	Market Share (percent)	
Verizon	36.80%	Verizon	36.80%	
AT&T	32.80%	AT&T	32.80%	
T-Mobile	15.40%	New T- Mobile	28.80%	
Sprint	13.40%			

Put differently, Verizon would still be 27% larger than New T-Mobile, and AT&T would be still

¹⁶ Public Knowledge, *Petition to Deny, supra* note 7, at 8 (quoting a Wall Street Journal article claiming that AT&T and Verizon were forced to reintroduce unlimited data plans because T-Mobile and Sprint "aggressively marketed unlimited data plans").

¹⁷ Id.

¹⁸ See T-Mobile and Sprint Description of Transaction, Public Interest Statement, and Related Demonstrations, WT Docket No. 18-197 at ii (filed June 18, 2018), https://newtmobile.com/content/uploads/2018/06/T-Mobile-Sprint-Public-Interest-Statement.pdf [hereinafter "Public Interest Statement"].

¹⁹ Id. at 85.

be 13.8% larger. In a business where scale is the chief driving force, New T-Mobile will still have a strong incentive to try to catch up with its still-significantly larger rivals.

But as in all economic questions, this question is not a binary one ("Will new T-Mobile still be a maverick?") but a *marginal* one — in fact, *two* marginal questions: (1) How much will the merger change the *incentive* of New T-Mobile to lower prices and enhance service offerings to attract customers; and (2) how much will the merger change the *ability* of New T-Mobile to actually win over customers? It is entirely possible that the merger might, on the margin, lessen New T-Mobile's *incentive* to lower prices to achieve scale yet do more to increase New T-Mobile's *ability* to build, operate, maintain and upgrade networks that will win over customers. The available evidence — indeed, the simple the fact that the two companies want to combine — suggests that a marginally less desperate, but significantly better resourced, capable and better run combined company will do more for consumers than could two separate companies that (a) lack the combined resources of the two and (b) must compete with each other as well as with AT&T and Verizon.

In 2017, T-Mobile CFO Braxton Carter candidly admitted to investors that "[T-Mobile's] disadvantage all along has been scale. ... And to achieve the margins that are possible to be achieved in the U.S., we have to have that scale." T-Mobile's lack of scale has made the company eager — even desperate — to attract customers, with offerings such as moving to unlimited data plans. But industry analysts worry that such moves, a result of T-Mobile's historic focus on growth instead of profitability, will be unsustainable unless the merger is

²⁰ See Adam Levy, *This is T-Mobile's Biggest Disadvantage*, The Motley Fool (Nov. 21, 2017), https://www.fool.com/investing/2017/11/21/this-is-t-mobiles-biggest-disadvantage.aspx.

approved.²¹ T-Mobile is considerably less profitable per subscriber — no doubt in part because of these aggressive moves to achieve scale — as is evident from each company's EBITDA (earnings before interest, taxes, depreciation, and amortization) margins: 13.67% for T-Mobile,²² 38.94% for AT&T,²³ and 34.47% for Verizon.²⁴

As McKinsey & Company noted in a 2017 analysis of the trade-off between growth and profit margins, companies who "generally place less emphasis on profitability" may be beneficial in the short term, but "they must eventually increase their focus on profitability to achieve sustainable growth."²⁵ Ultimately, T-Mobile's ability to raise the capital needed to invest in better networks — whether that means expanding coverage of rural areas or deploying 5G in more densely populated areas — depends on the company's profitability. With such low profit margins, how is the company going to keep up with Verizon and AT&T in investment?

Indeed, Verizon and AT&T are currently so far ahead of T-Mobile and Sprint that even the prospect of the two companies combining doesn't seem to concern Verizon CEO Lowell McAdam: when asked by *The Seattle Times* about the merger, he replied: "We don't have a point

²¹ See Trefis Team, What Lies Ahead For T-Mobile in 2018, Forbes (Jan. 2, 2018), https://www.forbes.com/sites/greatspeculations/2018/01/02/what-lies-ahead-for-t-mobile-in-2018/#28de3d874647 (noting that T-Mobile's "growth could slow down, amid saturation in the wireless market, increasing competition from AT&T and Verizon's unlimited plans and T-Mobile's relatively lower promotional activity" and that "T-Mobile has historically traded profitability in favor of growth, with its margins and profits coming in below its larger peers").

 $^{^{22}}$ See T-Mobile US's EBITDA Margin by quarter, CSIMarket (last visited Sept. 17, 2018), $\underline{\text{https://csimarket.com/stocks/singleProfitabilityRatios.php?code=TMUS\&ebit}}.$

²³ See AT&T's EBITDA Margin by quarter, CSIMarket (last visited Sept. 17, 2018), https://csimarket.com/stocks/singleProfitabilityRatios.php?code=T&ebit.

²⁴ See Verizon Communication's Inc's EBITDA Margin by quarter, CSIMarket (last visited Sept. 17, 2018), https://csimarket.com/stocks/singleProfitabilityRatios.php?code=VZ&ebit.

²⁵ Chandra Gnanasambandam, Allen Miller, & Kara Sprague, *Grow fast or die slow: The role of profitability in sustainable growth*, McKinsey & Company (Oct. 2017), https://www.mckinsey.com/industries/high-tech/our-insights/grow-fast-or-die-slow-the-role-of-profitability-in-sustainable-growth.

of view on whether it goes through or it doesn't. We frankly don't care."²⁶ AT&T Communications CEO John Donovan addressed the merger at the MoffettNathanson Media & Communications Summit this week and didn't seem worried: "We certainly won't contest it.... If you look at where we are as an industry in wireless, each of the competitors out there is embarking on a very different strategy."²⁷

Roger Entner, Founder and Analyst of telecommunications research and analytics firm Recon Analytics believes this will effectively be a two-to-three merger: "having three operators that are within 20% of phone subscribers compared to one another is a good thing. Consumers should benefit if three strong companies fight for customers with intense rivalry."²⁸

Opponents of the merger point to recent statements by either company about that company's ability to deploy a 5G network. These are, of course, the kinds of claims companies make all the time to reassure their investors. Furthermore, the fact that these claims were made shortly before the announcement of the merger suggests that what both companies really had in mind was that the merger would allow them to deliver on such claims.²⁹ Indeed, Petitioners point to statements made by T-Mobile CTO Neville Ray that were made on February 28, 2018 — a mere two months prior to the announcement of this merger with Sprint — that "T-Mobile will be the first to give customers a truly transformative, nationwide 5G network

²⁶ See Aaron Pressman, Verizon CEO Dismisses Sprint-T-Mobile Merger: 'We Don't Care', Fortune (May 2, 2018), http://fortune.com/2018/05/03/verizon-ceo-sprint-t-mobile/ (emphasis added).

²⁷ Monica Alleven, *AT&T's Donovan on T-Mobile/Sprint merger: We won't contest it*, Fierce Wireless (May 15, 2018), https://www.fiercewireless.com/wireless/at-t-s-donovan-t-mobile-sprint-combowe-won-t-contest-it.

²⁸ Roger Entner, *Details matter in the T-Mobile/Sprint merger*, Fierce Wireless (Aug. 17, 2918), https://www.fiercewireless.com/wireless/industry-voices-entner-details-matter-t-mobile-sprint-merger.

²⁹ See Public Knowledge, Petition to Deny, supra note 7, at 33.

they deserve."³⁰ Similarly, Petitioners point to a statement made by then-Sprint CFO Michele Combs on March 8, 2018 — less than two months prior to the merger's announcement — that "[Sprint has] the best assets in order to [deploy 5G]. [Sprint has] the best in terms of spectrum."³¹ Yet, both T-Mobile and Sprint have been trying to merge with each other, and other providers, for years.³² It would be surprising if the companies' statements about their future plans did *not* assume they would eventually merge with *some* other company, if not with each other. That Sprint and T-Mobile were anticipating a future merger when making those statements is even more likely when considering that, in Sprint's statement, it spoke of its unique access to spectrum — the very issue T-Mobile argues in its Public Interest Statement will prevent it from deploying 5G absent the merger.³³

Finally, while much has been made of T-Mobile's self-created image as a "maverick" in the industry, the company itself has attributed its success in recent years not to the price-cutting moves, or offerings like unlimited data, but to the company's 2013 merger with MetroPCS:

T-Mobile's Un-carrier strategy has worked, but it alone is not enough to overcome the scale and spectrum advantages of Verizon and AT&T. While T-Mobile has gained some market share, those gains have amounted to only a few percentage points after five years of continuous aggressive implementation of its

³⁰ *Id*.

³¹ Id. at 35.

³² See, e.g., Alex Heath, Only Winner of Failed AT&T Merger is T-Mobile, Cult of Mac (Dec. 20, 2011), https://www.cultofmac.com/136415/only-winner-of-failed-att-merger-is-t-mobile/; Mike Dano, T-Mobile execs lament failure of Sprint merger, but 'you never say never', Fierce Wireless (Jan. 9, 2018), https://www.fiercewireless.com/wireless/t-mobile-execs-lament-failure-sprint-merger-but-you-never-say-never.

³³ See Public Interest Statement, supra note 18, at 98-99 ("As discussed in greater detail above, as a standalone company, T-Mobile does not have the spectrum portfolio required to launch a competitive, broad, and deep nationwide 5G network during the next few years. T-Mobile's thin layer of 600 MHz spectrum provides excellent coverage, but is inadequate for purposes of providing target 5G speeds, low latency, or robust capacity.").

Un-carrier strategy. And, much of that gain is attributable to its successful acquisition and integration of MetroPCS, rather than taking share through organic gains in the marketplace.³⁴

This candid statement reveals, once again, the importance of scale: allowing T-Mobile to acquire MetroPCS made the two companies worth more than the sum of their parts. Just as that combination well served the public interest, there is every reason to think this one will, too.

C. Public Knowledge's Repeated Analogies to the Withdrawn AT&T/T-Mobile Merger Are Not Applicable to the Current Proposed Merger

Public Knowledge's Petition to Deny portrays the proposed merger as virtually identical to the withdrawn³⁵ merger in 2011 between AT&T and T-Mobile.³⁶ While both that merger and this merger would result in the elimination of one of the current four nationwide carriers,³⁷ the two deals are completely different in their effects on the market: the 2011 proposed merger would have combined the *second and third* largest competitors (in terms of nationwide subscribers), while the current proposed merger would combine the *third and fourth* largest competitors. As noted above, the combined market shares of T-Mobile and Sprint here would

³⁴ See Public Interest Statement, supra note 18, at 98.

³⁵ It is critical to note that while the DOJ filed a complaint against the AT&T/T-Mobile merger, see Complaint, United States v. AT&T Inc., 2011 WL 5347178 (D.D.C. 2011) (No. 1:11-CV-01560 ESH) (filed August 31, 2011) [hereinafter "DOJ 2011 Complaint"], available at https://www.justice.gov/atr/case-document/file/487776/download, and FCC bureau staff concluded that the proposed 2011 merger was not in the public interest AT&T withdrew the application for merger prior to any final decision being rendered by the FCC or the courts. See Applications of AT&T Inc. and Deutsche Telekom AG For Consent To Assign or Transfer Control of Licenses and Authorizations, Order, WT Docket No. 11-65 (Nov. 29, 2011), https://www.fcc.gov/proceedings-actions/mergers-transactions/att-and-t-mobile. As such, AT&T and T-Mobile never had "their day in court" to prove that the public interest benefits involved in the merger outweighed the dangers of increased market concentration. So at the same time that the proposed 2011 merger is factually distinct from the current proposed merger, the 2011 proposed merger cannot be cited as precedent in this proceeding, because there was never a final adjudication of the merits.

³⁶ See Public Knowledge, Petition to Deny, supra note 7, at 3-4, 6, 9, 13, 21, 31.

³⁷ But see Public Interest Statement, supra at 13 (in many geographic markets, neither T-Mobile nor Sprint currently offers wireless service; in these markets, the merger would be a 2-to-3 merger).

still be substantially less (28.8%) than the market share held by either Verizon (36.80%) or AT&T (32.80%), and T-Mobile would be the third largest wireless competitor both before, *and after*, the merger.³⁸ By contrast, in 2011, an AT&T/T-Mobile merger would have created the largest wireless carrier by a double-digit margin. The HHI increase in the 2011 proposed merger was over 700, nearly twice the HHI increase that would be caused by the current proposed merger.³⁹

For both factual and legal reasons, the proposed 2011 merger between AT&T and T-Mobile can have no impact on the analysis of a proposed merger today between T-Mobile and Sprint.⁴⁰

III. Capital Expenditures Tell the Clearest Story of the Market Today

While falling ARPU, as the clearest indicator for proxy for overall prices, tells a clear story of the current competitiveness of the wireless market, the best measure of the current ability of each of the four wireless companies to continue serving consumers is the amount they are able to invest in their networks. Writing in May for the Reuters "Breakingviews" column at *The New York Times*, Jennifer Saba declared "T-Mobile's 5G Argument to Regulators Is Compelling," noting this critical fact about relative investment levels:

The investment would dramatically boost the industry's levels of capital expenditure. The larger rivals AT&T and Verizon, which are competing to be leaders in 5G, dedicated approximately \$22 billion and \$17 billion to network investments last year. T-Mobile and Sprint together mustered just \$6 billion, according to Eikon data. And 5G is an expensive endeavor. New Street Research estimated that Verizon will spend \$35 billion over the next five

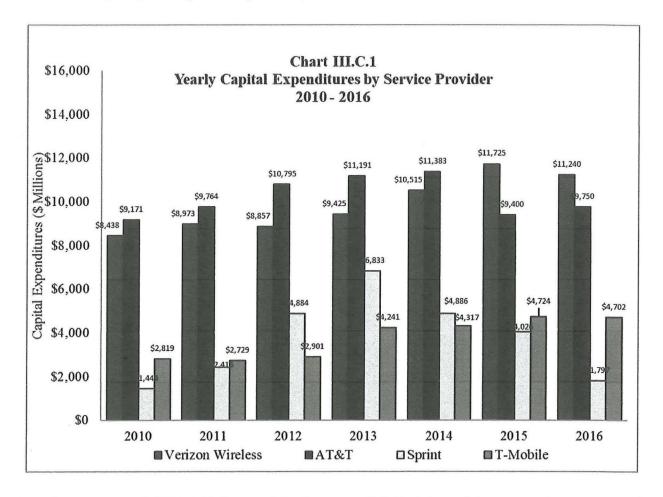
³⁸ *See supra* p. 7.

³⁹ See DOJ 2011 Complaint at 12.

 $^{^{40}}$ See Applications of Comcast Corporation, General Electric Company and NBC Universal, Inc., Memorandum Opinion and Order, 26 FCC Rcd. 4238, 4258 ¶ 45 (2011) ("All adjudicatory findings are fact specific and based on the evidence in the record in a specific matter.").

years to cover just 20 percent of the country. The cost ratchets up "significantly" to expand beyond that, the research firm said.⁴¹

The FCC's own data tell a similar story, summarizing total capital expenditures by company over a seven-year period (2010-16):⁴²



In only one year (2013) did the combined capex of T-Mobile and Sprint rank even second among the top three wireless companies by annual capex. On average, T-Mobile and Sprint *combined* represented just 73.77% of AT&T's capex (between 2010 and 2016 by year), for a 7-

⁴¹ Jennifer Saba, *T-Mobile's 5G Argument to Regulators Is Compelling*, New York Times (May 3, 2018), https://www.nytimes.com/2018/05/03/business/dealbook/t-mobile-5g-regulators.html (emphasis added); see also Mike Dano, No more penny pinching: Wireless carriers' capex to surge in 2018, Fierce Wireless (Feb. 20, 2018), https://www.fiercewireless.com/wireless/no-more-penny-pinching-wireless-carriers-capex-to-surge-2018.

⁴² See Twentieth Report, supra note 13, at 48.

year absolute difference in investment of \$18.73 billion; and T-Mobile and Sprint *combined* represented just 76.21% of Verizon's capex (between 2010 and 2016 by year), for a 7-year absolute difference in investment of \$16.45 billion. The two companies lag *very* far behind in investment.

IV. The Merger Will Benefit Consumers

A. The Merger Will Increase Combined Investment and Leverage that Investment Better.

The combination of the two companies will generate enormous cost-savings: roughly \$43.6 billion in total net present value by 2024.⁴³ These synergies will allow New T-Mobile to invest nearly \$40 billion on its 5G network over the next three years — or approximately *three times* the amount that T-Mobile could have invested on its own without the merger.⁴⁴ Indeed, T-Mobile and Sprint declare that they aim to deploy the *first* true, nationwide 5G network — leapfrogging Verizon and AT&T's networks.⁴⁵

B. New T-Mobile Will Better Serve Rural Areas.

In better providing wireless service to rural America, where T-Mobile and Sprint currently offer no service or spotty service to compete with Verizon and AT&T, this merger is actually a 2-to-3 merger. In delivering a wireless home broadband service comparable to existing wired service, this merger may be a 1-to-2 merger, if not a 2-to-3 merger.

Both Verizon and AT&T have announced plans for limited 5G deployments that rely heavily on their millimeter wave spectrum. The propagation characteristics of this spectrum mean that Verizon's and AT&T's planned deployments will focus on high density areas. New T-

⁴³ Public Interest Statement, supra note 18, at 15.

⁴⁴ Id.

⁴⁵ Id. at 17

Mobile's plans for a nationwide 5G network, which will not rely on millimeter wave spectrum, will be easier to deploy in rural areas. 46 T-Mobile's demonstrated commitment to lower pricing would serve consumers directly, while also forcing Verizon and AT&T, which have long had superior networks, to accelerate and expand their 5G deployment plans and quickly lower prices. 47

Furthermore, T-Mobile and Sprint say the new network enabled by the merger will support "a robust wireless broadband solution for residential use that will have equipment, service packages, and products matching or exceeding those of traditional . . . in-home wired broadband providers."⁴⁸ This service will support high definition and 4K video streaming,⁴⁹ making the service an alternative to existing, wired broadband providers. This will allow New T-Mobile to compete not just with AT&T and Verizon, but also with cable and telco companies.

C. The Merger Will Generate Enormous Efficiencies.

The merger will allow New T-Mobile to operate a more efficient combined network. Specifically, New T-Mobile will be able to eliminate around 35,000 Sprint cell base station sites as redundant. The cost savings from the elimination of leases, backhaul, utilities, upgrades, maintenance, and other recurring site-related expenses combined with having to build roughly 20,000 fewer macro sites and 40,000 fewer small cells than the two companies would have to build separately to achieve the same coverage will result in projected savings of roughly \$6.6 billion by 2024.⁵⁰ Those sites that are retained in the interim will provide added network

⁴⁶ Id. at 102.

⁴⁷ Id. at 50, 102.

⁴⁸ Id. at 60.

⁴⁹ Id. at 59.

⁵⁰ Public Interest Statement, *supra* note 18, Appendix C: Declaration of G. Michael Sievert, President and Chief Operating Officer, T-Mobile US, Inc. at 6-7 [hereinafter "Sievert Declaration"].

capacity during the transition, helping to reduce spectrum congestion in urban areas and ensuring that Sprint customers migrating to the New T-Mobile network have the same or better coverage everywhere. New T-Mobile will save further on deployment costs by eliminating future individual network builds and upgrades.⁵¹

D. Job Cuts Are a Merger-Specific Efficiency that Will Benefit Consumers, not a Harm.

Petitioners argue that the transaction will reduce overall employment by the two companies.⁵² The merging parties dispute these claims. This evidentiary dispute is utterly irrelevant: even if the transaction were, somehow, to allow New T-Mobile to eliminate *all* employees, and rely entire on machines, this increased efficiency would be a public interest *benefit*, not a harm, of the transaction: it would allow New T-Mobile to operate far more efficiently and pass those efficiencies on to consumers, either in the form of lower prices, a better network or other measures of non-price quality. The Commission's inquiry should be focused squarely on the welfare of consumers — not employees of the merging firms.

The reason for this should be obvious — but apparently is not. The Commission cannot jointly maximize consumer welfare and variables that are inherently inconsistent with the welfare of consumers without its analysis becoming inherently arbitrary. Differences of evidentiary support and predictive judgment as to whether a transaction will benefit consumers can be resolved, at least in principle, by attempting to reconcile competing evidence and weighing the likely accuracy of competing predictions. Differences of opinion on the trade-

⁵¹ Sievert Declaration at 6-7.

⁵² Public Knowledge, *Petition to Deny*, supra note 7, at 30; *see also* CWA Calls on Sprint and T-Mobile to Make Binding Commitments to Address Potential Job Loss and Respect Workers' Rights, Communications Workers of America, (June 26, 2018),

https://www.cwaunion.org/news/releases/cwa-calls-on-sprint-and-t-mobile-make-binding-commitments-address-potentialjob-loss.

off between lower prices for consumers and reduced employment by the two companies, however, are inherently value judgments as to the relative importance of two competing

stakeholders; the Commission's judgment between these two groups is inherently arbitrary

and political.

V. Conclusion

There is ample reason to believe this transaction will serve the public interest — and,

indeed, plenty of reason to fear that, without this transaction, T-Mobile and Sprint will fall

further and further behind market leaders AT&T and Verizon. Blocking this merger would

make the FCC directly responsible for denying American consumers the benefits of having

three strong players in the market for wireless services. For all these reasons, the transaction

should be approved — and the sooner, the better for consumers. Delay will only cost New T-

Mobile money and, perhaps even more importantly, time; the company will need both if it is to

catch up, and perhaps even surpass Verizon and AT&T.

Respectfully submitted,

TECHFREEDOM

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19