

INTERNET AND TELECOMMUNICATION REGULATION

FIRST EDITION

2021 SUPPLEMENT

STUART MINOR BENJAMIN
DUKE UNIVERSITY SCHOOL OF LAW

JAMES B. SPETA
NORTHWESTERN UNIVERSITY PRITZKER SCHOOL OF LAW

CAROLINA ACADEMIC PRESS
Durham, North Carolina

Copyright © 2021
Carolina Academic Press, LLC
All Rights Reserved

Carolina Academic Press
700 Kent Street
Durham, NC 27701
Phone: 919-489-7486
Fax: 919-493-5668
www.cap-press.com

Contents

Chapter 4 · Zoning the Spectrum

Revision on page 102 to note 10

Insert on page 142 after note 2

Note/Question on Another Model: Giving State Governments Control of Spectrum 1

Chapter 5 · Structuring and Assigning Licenses

Insert on page 210 at the end of note 6

Insert on page 213 after note 8

Note/Question on Incentive Auctions for High-Band Spectrum 3

Chapter 7 · Control of Telephone Monopolies

Insert on page 292 to the end of note 4 5

Chapter 8 · Multichannel Video Foundations

Insert on page 340 after note 7

Note/Question on Changing Status of Leased Access 6

Chapter 10 · Structural Regulation of Content Distribution and Production

Insert on page 475 after note 7

Note/Question on 17 Years Later, the End of the *Prometheus* Litigation

FCC v. Prometheus Radio Project, 141 S. Ct. 1150 (2021) 7

Chapter 11 · Antitrust and Merger Review

Insert on page 632 after note 3

Note/Question on The Short Life of a Merger

§11.A.8. T-Mobile/Sprint

New York v. Deutsche Telekom AG, 439 F.Supp.3d 179 (S.D.N.Y. 2020) 12

Chapter 13 · Universal Service: From Telephony to Broadband

Insert on page 700 after note 8

Note/Question on Rural Digital Opportunity Fund 28

Chapter 14 · Regulating Broadband Networks

Insert on page 844

Mozilla Corp. v. FCC, 940 F.3d 1 (D.C. Cir. 2019) 29

Chapter 15 · Internet Platform Regulation

Insert on page 881 after note 4

Note/Question on Services Built on User-Generated Content 46

Insert on page 885 to the end of note 5 46

Insert on page 885 after note 5

Note/Question on Executive Order on Section 230 46

Insert on page 895 after note 4

Note/Question on Government Services 47

Chapter 16 · Direct Regulation of Content Deemed Harmful

Insert on page 1006 after note 15

Note/Question on Paring Back 48

CHAPTER 4

Zoning the Spectrum

Revision on page 102 to note 10. Delete the last sentence of note 10 and add the following:

In 2019, as part of its effort to make more spectrum available for 5G services, the FCC adopted an order finally bringing modern spectrum flexibility to this band. In particular, the FCC, while allowing a Tribal priority window, eliminated eligibility requirements, eliminated educational use requirements, and otherwise permitted flexible uses of the spectrum. Transforming the 2.5 GHz Band, Report and Order, 34 FCC Rcd. 5446 (2019).

Insert on page 142 after note 2:

3. Another Model: Giving State Governments Control of Spectrum. In 2002, the Commission designated 4.94–4.99 GHz for public safety licenses on a shared basis. 4.9 GHz Band Transferred from Federal Government Use, Second Report and Order and Further Notice of Proposed Rulemaking, 17 FCC Rcd. 3955 (2002). Only 3.5% of potential licensees were in use as of 2018, however. Amendment of Part 90 of the Commission’s Rules, Sixth Further Notice of Proposed Rulemaking, 33 FCC Rcd. 3261, 3261 ¶ 1 (2018). Public safety entities blamed this on high equipment costs and limited availability of broadband equipment. *Id.* ¶ 2. In 2020, the FCC responded with a unique approach—it would allow each state government to choose a single state government entity to lease this spectrum as each saw fit: “States can continue to use the spectrum for their own public safety network operations; they can enter into one or more commercial arrangements for commercial deployment of public-safety communications services; they can lease the spectrum to a commercial service provider for deployment of mobile or fixed wireless Internet service, private land mobile radio service or critical infrastructure connectivity; or they can pursue a combination of any of these scenarios (or any other arrangement that is allowed for pursuant to the service rules for the band and our *Secondary Markets* rules [referring to the secondary markets order in the casebook]).” Amendment of Part 90 of the Commission’s Rules, Sixth Report and Order and Seventh Further Notice of Proposed Rulemaking, 36 FCC Rcd. 1958, 1959 ¶ 2 (2021).¹

The FCC has long allotted licenses on a geographical basis, but those decisions are generally based on population-based classifications (e.g., major trading areas or partial economic areas) that do not follow state borders. Allotting licenses based on the accident of state borders is different, particularly for small states: having potentially quite different licensing regimes that draw a line at the border between Rhode Island and Connecticut seems less efficient than the other allotment regimes that the Commission has used.

Granting control to state governments bears some resemblance to the regime for the spectrum in the 758–769 MHz and 788–799 MHz bands. For those frequencies, the FCC granted a nationwide license for a public safety network to an entity called the First Responder Network Authority (known as FirstNet). The regulations creating this public safety network allowed states to decide whether to opt in or out of the network. But if states opted out, they could not use the spectrum as they pleased. On the contrary, they were required to create an alternative plan that insured interoperability with the nationwide public safety network and adherence to FirstNet network policies. Licensing of the 758–769 MHz and 788–799 MHz Bands; State opt-out election and alternative plans, 47 C.F.R. § 90.532(e). (Perhaps unsurprisingly, all states opted in.) The FirstNet regime contrasts sharply with the broad authority that the 4.9GHz rules gave to states to choose how they wanted to use the spectrum. Interestingly, in the 4.9GHz proceeding a group called the Public Safety Spectrum Alliance argued that the 4.9GHz spectrum should be managed by FirstNet. The FCC rejected this proposal, stating “We decline to assign the 4.9 GHz band to FirstNet—which would deprive states (as well as public safety entities within that state) any choice in how the band is used.” Amendment of Part 90 of the Commission’s Rules, 36 FCC Rcd. at 1966 ¶ 21.

¹ Commissioner O’Rielly’s statement highlighted the compromises that sometimes arise even among commissioners who ultimately vote the same way. O’Rielly noted that he sought full commercialization of the band, and said “Sadly, my request didn’t win the day with my colleagues. Compelled to pivot, I have tried to live within the rather, let’s say, interesting approach taken in this item.” Statement of Commissioner Michael O’Rielly, 36 FCC Rcd. 2010 (2021).

A number of public safety groups petitioned the FCC to reconsider the order, expressing fears of “a disconnected patchwork of regulations’ as states adopt different rules governing leased access and public safety use.” Amendment of Part 90 of the Commission’s Rules, Order, WP Docket No. 07-100, FCC 21-66, 2021 WL 2188617, ¶ 7 (2021) (quoting the stay petition of the Public Safety Spectrum Alliance). After a change in Presidential administrations (and the Trump Administration’s replacement of one Republican commissioner with another), the FCC in 2021 voted to stay its 2020 order. The stay states that “allowing use of the band to become fragmented on a state-by-state basis could create incentives for individual states to make use of the spectrum for revenue generation in ways that do not serve the interests of public safety, decreasing the likelihood of interoperable communications for public-safety users, which we recognize is an important Congressional objective. Furthermore, this fragmentation may undermine the ability of operators to upgrade their networks to improve public safety offerings and make more efficient use of spectrum resources.” *Id.* ¶ 8.

The larger allotment question is under what, if any, circumstances it makes sense to allot licenses A) on a state-by-state basis B) to state governments. Presumably the latter consideration (empowering state governments) is a major part of the attraction, given the variation in state sizes: if the state government component was irrelevant, it is hard to understand why it would be attractive to have allotments allowing completely different licensing regimes in areas as big as Texas and as small as Rhode Island, rather than either more uniformly sized land areas or population-based allotments. Thus the desirability of this state-based licensing regime seems to depend on the desirability of having state governments as the decisionmakers. Put differently, such a regime allows state governments to go their own way on how to handle “their” spectrum, but assessment of that regime depends on one’s sense of the desirability of having such decisions made by states. What considerations do you think the FCC should take into account in determining the desirability of empowering state governments in this way? Should the FCC refrain from making such determinations? If so, does that mean that the FCC should attribute no benefit to state governmental decisionmaking, or should it choose another default?

CHAPTER 5

Structuring and Assigning Licenses

Insert on page 210 at the end of note 6:

The AWS-3 auction did not remain the highest revenue auction for long. In 2021, the FCC completed an auction for licenses in the 3.7–3.98GHz band (known as the C-band) that yielded more than \$81 billion in auction revenues. Verizon accounted for more than \$45 billion, AT&T for more than \$23 billion, and T-Mobile for more than \$9 billion. No other bidder accounted for more than \$1.3 billion. *See* FCC, FCC Announces Winning Bidders in C-band Auction (Feb. 24, 2021), <https://www.fcc.gov/document/fcc-announces-winning-bidders-c-band-auction>.

These high bids highlight the increased importance of mid-band spectrum, which is conventionally defined as spectrum between 1 and 6 GHz. As the casebook notes (e.g., on page 104), low-band spectrum (below 1 GHz) had long been the most valuable (“beachfront”) spectrum. But with the rise of 5G services, mid-band spectrum (which is well-suited to 5G) increased in value. The beach, in other words, got much larger. This highlights the ways in which wireless frequencies are not like land. Technology can add capacity (and value) to wireless frequencies. A rough land analogy would exist if we could build, and easily replace as technology developed, buildings that could stretch to hundreds of stories depending on our needs. Land does not have that flexibility, but spectrum does. As the casebook notes on page 58, with spectrum “the more you spend, the more you can send.” The bottom line is that mid-band spectrum is much more valuable than it was in the first decade of the 21st century (and wildly more valuable than it was in the 20th century).

Insert on page 213 after note 8:

9. Incentive Auctions for High-Band Spectrum. As the casebook notes, the history of spectrum usage has been one of increasing possibilities for the use of a broader range of spectrum. Frequencies that had been considered too high to be practical for consumer uses have over time become more attractive for such uses. The possibility for valuable new uses of higher-band frequencies runs into another problem discussed in the casebook: virtually all potentially usable frequencies have been allocated for specific uses that may not be compatible with possible new consumer uses. An example is the 39 GHz band (38.6–40 GHz). Those frequencies had long been considered too high to be useful for valuable commercial services, but advances in technology raised the prospect of new valuable services. The Commission decided to establish flexible-use rules for the 39 GHz band that would allow for a wide range of services, as it had done with lower frequencies (as discussed in Chapter Four of the casebook). A complication was that the 39 GHz band was already allocated to more specific fixed and mobile uses. But those uses had fairly low demand. One indication of that low demand is that there were only 870 terrestrial fixed service licenses assigned out of 2,464 possible licenses. *Use of Spectrum Bands Above 24 GHz for Mobile Radio Services, Report and Order and Further Notice of Proposed Rulemaking*, 31 FCC Rcd. 8014, 8043 ¶ 74 (2016).

So how was the Commission going to move from the existing regime to the new one that it sought? The Commission decided to create its second incentive auction (the first is the one discussed in this section of the casebook). In the Commission’s words, “an incumbent 39 GHz licensee may choose to relinquish the spectrum usage rights provided by its existing licenses in exchange for a share of the proceeds from the auction of new licenses. Alternatively, the incumbent may choose to receive modified licenses after the auction that are consistent with the new band plan and service rules and equivalent to its existing authorizations to operate in the 39 GHz band.” *Use of Spectrum Bands Above 24 GHz for Mobile Radio Services, Fourth Report and Order*, 33 FCC Rcd. 12,168, 12,168–69 ¶ 1 (2018). Why go this route? The Commission stated that

Absent [an incentive auction], existing 39 GHz licenses break up blocks of spectrum and fragment frequencies across the 39 GHz band, creating barriers to the deployment of next-generation services in the band. The incentive auction will solve this challenge by offering incumbent licensees the opportunity to participate in the auction to relinquish their existing licensed spectrum usage rights in exchange for a payment determined by the auction and/or to replace existing licenses with new licenses for whole blocks that will be assigned contiguous frequencies within license areas. Further, for each incumbent that does not wish to participate in the auction, we will provide the incumbent with modified licenses for contiguous 100 megahertz blocks covering full Partial Economic Areas (PEAs), leaving these incumbents better able to provide next-generation services. Providing these opportunities is necessary to resolve the difficulties presented by the existing encumbered and unpaired licenses and to clear the way for assignment of a significant number of new licenses for whole blocks with contiguous frequencies within PEAs.

Id. ¶ 7. Are you persuaded that incentive auctions are in fact the most efficient way for the Commission to proceed? Was this too generous to existing licensees or not generous enough? Why didn't the Commission simply revoke the existing licenses?

The Commission conducted the incentive auction for the 39 GHz band (along with a portion of the 37GHz band and the 47 GHz band) in 2019 and 2020. It generated proceeds of more than \$7.5 billion—\$3.4 billion from Verizon, \$2.4 billion from AT&T, and \$900 million from T-Mobile. Incentive Auction of Upper Microwave Flexible Use Service Licenses in the Upper 37 GHz, 39 GHz, and 47 GHz Bands for Next-Generation Wireless Services Closes, Public Notice, 35 FCC Rcd. 2015 ¶ 2, 2035–37 (2020). Is it a problem that the biggest wireless providers were the highest bidders? Is it relevant that the technology to use these high bands is still being developed, and requires tons of resources, which smaller companies are less likely to have?

CHAPTER 7

Control of Telephone Monopolies

Insert on page 292 to the end of note 4:

Applying this framework, the FCC has taken a number of significant steps to further reduce the unbundling and resale requirements that still continued from the 1996 Act. *See* Business Data Services in An Internet Protocol Environment, Report and Order on Remand and Memorandum Opinion and Order, 34 FCC Rcd. 5767 (2019) (largely eliminating unbundling and resale requirements for Business Data Services); Petition of USTelecom for Forbearance Pursuant to 47 U.S.C. § 160(c) to Accelerate Investment in Broadband and Next Generation Networks, Memorandum Opinion and Order, 34 FCC Rcd. 6503 (2019) (eliminating unbundling and resale requirements for analog local loops). In November 2019, the FCC, saying that, “over the last 23 years, the communications landscape has dramatically transformed, with both the voice and broadband marketplaces replete with competition from a multitude of providers using a variety of technologies and offering communications capabilities and services unforeseen in 1996,” issued a proposal to reconsider and to eliminate all continuing unbundling and resale requirements. *Matter of Modernizing Unbundling and Resale Requirements in an Era of Next-Generation Networks and Services*, Notice of Proposed Rulemaking 34 FCC Rcd. 11,290, 11,291 ¶ 2 (2019).

CHAPTER 8

Multichannel Video Foundations

Insert on page 340 after note 7:

8. Changing Status of Leased Access. Reflecting its view that “[t]he video marketplace has changed significantly since the Commission initially adopted its leased access rules,” and specifically that “online platforms” provide significant choice to programmers and creators, the FCC has eliminated the part-time leased access rules, limited the remaining requirements that cable systems negotiate leased access, and asked for comment on whether any leased access rules can, given the changed marketplace, survive First Amendment scrutiny. Leased Commercial Access; Modernization of Media Regulation Initiative, Report and Order and Second Further Notice of Proposed Rulemaking, 34 FCC Rcd. 4934, 4935 ¶ 2 (2019).

CHAPTER 10

Structural Regulation of Content Distribution and Production

Insert on page 475 after note 7:

8. 17 Years Later, the End of the *Prometheus* Litigation. After the Commission’s 2017 order on reconsideration discussed on pages 474–75 of the casebook, *Prometheus* petitioned for review, so it was back to the Third Circuit for *Prometheus IV*. The court approved the FCC’s decision to change its approach to local concentration, under which only mergers of the “top four” stations in a market would be prohibited. But the court also found that the FCC had yet to adequately explain how its rules changes would impact diversity in broadcast ownership, and so it vacated the elimination of the newspaper/broadcast and television/radio cross-ownership rules. *Prometheus Radio Project v. FCC*, 939 F.3d 567 (3d Cir. 2019). The Supreme Court granted the FCC’s petition for certiorari and reversed in the opinion below.

FCC v. PROMETHEUS RADIO PROJECT 141 S. Ct. 1150 (2021)

KAVANAUGH, J., delivered the opinion for a unanimous Court. THOMAS, J., filed a concurring opinion.

JUSTICE KAVANAUGH delivered the opinion of the Court.

The Federal Communications Commission possesses broad statutory authority to regulate broadcast media “as public convenience, interest, or necessity requires.” 47 U.S.C. § 303; *see also* § 309(a). Exercising that authority, the FCC has historically maintained several strict ownership rules. The rules limit the number of radio stations, television stations, and newspapers that a single entity may own in a given market. The FCC has long explained that the ownership rules seek to promote competition, localism, and viewpoint diversity by ensuring that a small number of entities do not dominate a particular media market.

This case concerns three of the FCC’s current ownership rules. The first is the Newspaper/Broadcast Cross-Ownership Rule. Initially adopted in 1975, that rule prohibits a single entity from owning a radio or television broadcast station and a daily print newspaper in the same media market. The second is the Radio/Television Cross-Ownership Rule. Initially adopted in 1970, that rule limits the number of combined radio stations and television stations that an entity may own in a single market. And the third is the Local Television Ownership Rule. Initially adopted in 1964, that rule restricts the number of local television stations that an entity may own in a single market.

The FCC adopted those rules in an early-cable and pre-Internet age when media sources were more limited. By the 1990s, however, the market for news and entertainment had changed dramatically. Technological advances led to a massive increase in alternative media options, such as cable television and the Internet. Those technological advances challenged the traditional dominance of daily print newspapers, local radio stations, and local television stations.

To ensure that the FCC’s ownership rules do not remain in place simply through inertia, Section 202(h) of the Telecommunications Act of 1996 directs the FCC to review its ownership rules every four years to determine whether those rules remain “necessary in the public interest as the result of competition.” § 202(h). After conducting each quadrennial Section 202(h) review, the FCC “shall repeal or modify” any rules that it determines are “no longer in the public interest.” *Id.* Section 202(h) establishes an iterative process that requires the FCC to keep pace with industry developments and to regularly reassess how its rules function in the marketplace.

Soon after Section 202(h) was enacted, the FCC stated that the agency’s traditional public interest goals of promoting competition, localism, and viewpoint diversity would inform its Section 202(h) analyses. The FCC has also said that, as part of its public interest analysis under Section 202(h), it would assess the effects of the ownership rules on minority and female ownership.

Since 2002, the Commission has repeatedly sought to change several of its ownership rules—including the three rules at issue here—as part of its Section 202(h) reviews. *See* 2002 Biennial Regulatory Review, Report and Order and Notice of Proposed Rulemaking, 18 FCC Rcd. 13,620 (2003) (2002 Review) (eliminating strict caps on newspaper/broadcast and radio/television cross-ownership and modifying the Local Television Ownership Rule); 2006 Quadrennial Regulatory Review, Report and Order and Order on Reconsideration, 23 FCC Rcd. 2010, 2021

(2008) (relaxing the Newspaper/Broadcast Cross-Ownership Rule). But for the last 17 years, the Third Circuit has rejected the FCC’s efforts as unlawful under the APA. *See* *Prometheus Radio Project v. FCC*, 373 F.3d 372 (2004); *Prometheus Radio Project v. FCC*, 652 F.3d 431 (2011); *see also* *Prometheus Radio Project v. FCC*, 824 F.3d 33 (2016). As a result, those three ownership rules exist in substantially the same form today as they did in 2002.²

The current dispute arises out of the FCC’s most recent attempt to change its ownership rules. In its quadrennial Section 202(h) order issued in 2016, the FCC concluded that the Newspaper/Broadcast Cross-Ownership, Radio/Television Cross-Ownership, and Local Television Ownership Rules remained necessary to serve the agency’s public interest goals of promoting “competition and a diversity of viewpoints in local markets.” 2014 Quadrennial Regulatory Review, Second Report and Order, 31 FCC Rcd. 9864, 9865 (2016) (2016 Order). The FCC therefore chose to retain the existing rules with only “minor modifications.” *Id.*

A number of groups sought reconsideration of the 2016 Order. In 2017, the Commission (with a new Chair) granted reconsideration. 2014 Quadrennial Regulatory Review, Order on Reconsideration and Notice of Proposed Rulemaking, 32 FCC Rcd. 9802 (2017) (2017 Reconsideration Order). On reconsideration, the FCC performed a new public interest analysis. The agency explained that rapidly evolving technology and the rise of new media outlets—particularly cable and Internet—had transformed how Americans obtain news and entertainment, rendering some of the ownership rules obsolete. As a result of those market changes, the FCC concluded that the three ownership rules no longer served the agency’s public interest goals of fostering competition, localism, and viewpoint diversity. The FCC explained that permitting efficient combinations among radio stations, television stations, and newspapers would benefit consumers.

The Commission also considered the likely impact of any changes to its ownership rules on minority and female ownership. The FCC concluded that repealing or modifying the three ownership rules was not likely to harm minority and female ownership.

Based on its analysis of the relevant factors, the FCC decided to repeal the Newspaper/Broadcast and Radio/Television Cross-Ownership Rules, and to modify the Local Television Ownership Rule.

The Third Circuit vacated the 2017 Reconsideration Order. The court did not dispute the FCC’s conclusion that those three ownership rules no longer promoted the agency’s public interest goals of competition, localism, and viewpoint diversity. But the court held that the record did not support the FCC’s conclusion that the rule changes would “have minimal effect” on minority and female ownership. *Prometheus Radio Project v. FCC*, 939 F.3d 567, 584 (3d Cir. 2019). The court directed the Commission, on remand, to “ascertain on record evidence” the effect that any rule changes were likely to have on minority and female ownership, “whether through new empirical research or an in-depth theoretical analysis.” *Id.* at 587.

In the 2017 Reconsideration Order, the FCC changed three of its ownership rules because it concluded that the rules were no longer in the public interest. In particular, the FCC concluded that the rules no longer served the agency’s goals of fostering competition, localism, and viewpoint diversity, and further concluded that repealing or modifying the rules was not likely to harm minority and female ownership.

Prometheus argues that the FCC’s predictive judgment regarding minority and female ownership was arbitrary and capricious under the APA. *See* 5 U.S.C. § 706(2)(A). We disagree.

The APA’s arbitrary-and-capricious standard requires that agency action be reasonable and reasonably explained. Judicial review under that standard is deferential, and a court may not substitute its own policy judgment for that of the agency. A court simply ensures that the agency has acted within a zone of reasonableness and, in particular, has reasonably considered the relevant issues and reasonably explained the decision.

In its 2017 Reconsideration Order, the FCC analyzed the significant record evidence of dramatic changes in the media market over the past several decades. After thoroughly examining that record evidence, the Commission determined that the Newspaper/Broadcast Cross-Ownership, Radio/Television Cross-Ownership, and Local

² The FCC currently has two other ownership rules that are subject to its quadrennial Section 202(h) review: (1) the Local Radio Ownership Rule, which limits the number of radio stations that an entity may own in a single market, and (2) the Dual Network Rule, which prohibits mergers among the top four television broadcast networks (ABC, CBS, Fox, and NBC). The FCC has one additional ownership rule, the National Television Ownership Rule, which is not subject to review under Section 202(h). That rule limits the number of television stations that a single entity may own nationwide. Those other rules are not at issue in this case.

Television Ownership Rules were no longer necessary to serve the agency's public interest goals of promoting competition, localism, and viewpoint diversity. The FCC therefore concluded that repealing the two cross-ownership rules and modifying the Local Television Ownership Rule would fulfill "the mandates of Section 202(h)" and "deliver on the Commission's promise to adopt broadcast ownership rules that reflect the present, not the past." 32 FCC Rcd. at 9803.

In analyzing whether to repeal or modify those rules, the FCC also addressed the possible impact on minority and female ownership. The Commission explained that it had sought public comment on the issue of minority and female ownership during multiple Section 202(h) reviews, but "no arguments were made" that would lead the FCC to conclude that the existing rules were "necessary to protect or promote minority and female ownership." *Id.* at 9822. Indeed, the FCC stated that it had received several comments suggesting the opposite—namely, comments suggesting that eliminating the Newspaper/Broadcast Cross-Ownership Rule "potentially could *increase* minority ownership of newspapers and broadcast stations." *Id.* at 9823 (emphasis added). Based on the record, the Commission concluded that repealing or modifying the three rules was not likely to harm minority and female ownership.

In challenging the 2017 Reconsideration Order in this Court, Prometheus does not seriously dispute the FCC's conclusion that the existing rules no longer serve the agency's public interest goals of competition, localism, and viewpoint diversity. Rather, Prometheus targets the FCC's assessment that altering the ownership rules was not likely to harm minority and female ownership.

Prometheus asserts that the FCC relied on flawed data in assessing the likely impact of changing the rules on minority and female ownership. Prometheus further argues that the FCC ignored superior data available in the record.

Prometheus initially points to two data sets on which the FCC relied in the 2016 Order and the 2017 Reconsideration Order. Those data sets measured the number of minority-owned media outlets before and after the Local Television Ownership Rule and the Local Radio Ownership Rule were relaxed in the 1990s. Together, the data sets showed a slight decrease in the number of minority-owned media outlets immediately after the rules were relaxed, followed by an eventual increase in later years. The 2016 Order cited those data sets and explained that the number of minority-owned media outlets had increased over time. But the FCC added that there was no record evidence suggesting that past changes to the ownership rules had caused minority ownership levels to increase.

In the 2017 Reconsideration Order, the FCC referred to the 2016 Order's analysis of those data sets. The FCC stated that data in the record suggested that the previous relaxations of the Local Television Ownership and Local Radio Ownership Rules "have not resulted in reduced levels of minority and female ownership." 2017 Reconsideration Order, 32 FCC Rcd. at 9831. The FCC further explained that "no party" had "presented contrary evidence or a compelling argument demonstrating why" altering the rules would have a different impact today. *Id.* at 9839. The FCC therefore concluded that "the record provides no information to suggest" that eliminating or modifying the existing rules would harm minority and female ownership. *Id.* at 9831.

Prometheus insists that the FCC's numerical comparison was overly simplistic and that the data sets were materially incomplete. But the FCC acknowledged the gaps in the data. And despite repeatedly asking for data on the issue, the Commission received no other data on minority ownership and no data at all on female ownership levels. The FCC therefore relied on the data it had (and the absence of any countervailing evidence) to predict that changing the rules was not likely to harm minority and female ownership.

Prometheus also asserts that countervailing—and superior—evidence was in fact in the record, and that the FCC ignored that evidence. Prometheus identifies two studies submitted to the FCC by Free Press, a media reform group. Those studies purported to show that past relaxations of the ownership rules and increases in media market concentration had led to decreases in minority and female ownership levels. According to Prometheus, the Free Press studies undercut the FCC's prediction that its rule changes were unlikely to harm minority and female ownership.

The FCC did not ignore the Free Press studies. The FCC simply interpreted them differently. In particular, in the 2016 Order, the Commission explained that its data sets and the Free Press studies showed the same long-term increase in minority ownership after the Local Television Ownership and Local Radio Ownership Rules were relaxed. Moreover, as counsel for Prometheus forthrightly acknowledged at oral argument, the Free Press studies were purely backward-looking, and offered no statistical analysis of the likely future effects of the FCC's proposed rule changes on minority and female ownership.

In short, the FCC's analysis was reasonable and reasonably explained for purposes of the APA's deferential arbitrary-and-capricious standard. The FCC considered the record evidence on competition, localism, viewpoint

diversity, and minority and female ownership, and reasonably concluded that the three ownership rules no longer serve the public interest. The FCC reasoned that the historical justifications for those ownership rules no longer apply in today's media market, and that permitting efficient combinations among radio stations, television stations, and newspapers would benefit consumers. The Commission further explained that its best estimate, based on the sparse record evidence, was that repealing or modifying the three rules at issue here was not likely to harm minority and female ownership. The APA requires no more.³

To be sure, in assessing the effects on minority and female ownership, the FCC did not have perfect empirical or statistical data. Far from it. But that is not unusual in day-to-day agency decisionmaking within the Executive Branch. The APA imposes no general obligation on agencies to conduct or commission their own empirical or statistical studies. And nothing in the Telecommunications Act (or any other statute) requires the FCC to conduct its own empirical or statistical studies before exercising its discretion under Section 202(h). Here, the FCC repeatedly asked commenters to submit empirical or statistical studies on the relationship between the ownership rules and minority and female ownership. Despite those requests, no commenter produced such evidence indicating that changing the rules was likely to harm minority and female ownership. In the absence of additional data from commenters, the FCC made a reasonable predictive judgment based on the evidence it had.

In light of the sparse record on minority and female ownership and the FCC's findings with respect to competition, localism, and viewpoint diversity, we cannot say that the agency's decision to repeal or modify the ownership rules fell outside the zone of reasonableness for purposes of the APA.

We reverse the judgment of the U. S. Court of Appeals for the Third Circuit.

JUSTICE THOMAS, concurring.

The FCC had no obligation to consider minority and female ownership. Nothing in § 202(h) of the Telecommunications Act of 1996 directs the FCC to consider rates of minority and female ownership.

Respondents not[e] that the FCC has previously discussed ownership diversity when considering its ownership rules. They contend that the FCC thus believed that a purpose of those rules is to promote minority and female ownership. And because an agency cannot “depart from a prior policy *sub silentio*,” *FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 515 (2009), they argue that the FCC either had to consider ownership diversity or expressly repudiate its prior policy. That argument fails because the FCC's ownership rules—unlike some of its *nonownership* rules—were never designed to foster ownership diversity.

From its infancy, the FCC has generally focused on consumers, not producers. The year after it was established, the agency that would later become the FCC made clear that “‘emphasis must be first and foremost on the interest, the convenience, and the necessity of the listening public, and not on the interest, convenience, or necessity of the individual broadcaster.’” *FCC v. Pottsville Broadcasting Co.*, 309 U.S. 134, 139 n.2 (1940) (quoting a 1928 agency document).

The FCC kept true to that design when promulgating ownership rules. For example, when it created the Newspaper/Broadcast Cross-Ownership Rule at issue here, the agency explained that its “ownership rules rest on two foundations: the twin goals of diversity of viewpoints and economic competition,” and that viewpoint diversity is the “higher” policy. Amendment of Sections 73.34, 73.240, And 73.636 of the Commission's Rules, 50 F.C.C. 2d 1046, 1074 (1975). To these two consumer-focused goals, the FCC has also added a third: localism. 2002 Biennial Regulatory Review, Report and Order and Notice of Proposed Rulemaking, 18 FCC Rcd. 13,620, 13,624 ¶ 8, 13,645 ¶ 81 (2003). None of these objectives advances demographic diversity of owners for the sake of owners.

To be sure, the FCC has sometimes considered minority and female ownership of broadcast media when discussing ownership rules. Time after time, however, it has viewed those forms of diversity not “as policy goals in and of themselves, but as proxies for viewpoint diversity.” 2002 Biennial Regulatory Review, Notice of Proposed Rulemaking, 17 FCC Rcd. 18,503, 18,519 ¶ 41& n.116, 18,521 ¶ 50 (2002); Policies and Rules Regarding Minority

³ Because we hold that the Third Circuit's judgment must be reversed under ordinary principles of arbitrary-and-capricious review, we need not reach the industry petitioners' alternative argument that the text of Section 202(h) does not authorize (or at least does not require) the FCC to consider minority and female ownership when the Commission conducts its quadrennial reviews. We also need not consider the industry petitioners' related argument that the FCC, in its Section 202(h) review of an ownership rule, may not consider minority and female ownership unless promoting minority and female ownership was part of the FCC's original basis for that ownership rule.

and Female Ownership of Mass Media Facilities, 10 FCC Rcd. 2788, 2788 ¶¶ 1–2 (1995) (“promoting minority ownership of broadcasting and cable television facilities serves to enhance the diversity of viewpoints presented”). The FCC has also said that ownership diversity “promote[s] competition.” *Id.* at 2789 ¶ 6. And although the FCC has occasionally used language that, read in isolation, could suggest a freestanding goal of promoting ownership diversity, *e.g.*, 17 FCC Rcd. at 18,521 ¶ 50 (“[T]he Commission has historically used the ownership rules to foster ownership by diverse groups, such as minorities, women and small businesses”), these comments must be viewed in the light of the FCC’s repeated statements that “the core Commission goal [is] maximizing the diversity of points of view available to the public” and that “promoting minority [and female] ownership of broadcasting and cable television facilities serves” this core goal. *E.g.*, 10 FCC Rcd. at 2788 ¶¶ 1–2.

[T]he FCC clarified in this proceeding that it considered ownership diversity a potential means to pursue viewpoint diversity, not a freestanding goal of its ownership rules. To cite just a few examples, in its 2016 order the FCC explained that it “has a long history of promulgating rules and regulations intended to promote diversity of ownership among broadcast licensees, and *thereby* foster a diversity of voices.” 2016 Order ¶ 237 (emphasis added). It afforded certain companies waivers from various rules to “serve our broader goal of diversity of ownership, and *thus* viewpoint diversity.” *Id.* ¶ 238 (emphasis added). And it noted that it could not promulgate a race-conscious regulation without first “demonstrat[ing] a connection between minority ownership and viewpoint diversity” that would “satisfy strict scrutiny.” *Id.* ¶ 297.

Here, as in 2003, once the FCC determined that none of its policy objectives for ownership rules—viewpoint diversity, competition, and localism—justified retaining its rules, the FCC was free to modify or repeal them without considering ownership diversity. Indeed, the FCC has long been clear that “it would be inappropriate to retain multiple ownership regulations for the sole purpose of promoting minority ownership.” Amendment of Section 73.3555 [formerly Sections 73.35, 73.240 and 73.636] of the Commission’s Rules, Memorandum Opinion and Order, 100 F.C.C. 2d 74, 94 ¶ 45 (1985). The Third Circuit had no authority to require the FCC to consider minority and female ownership. So in future reviews, the FCC is under no obligation to do so.

Notes and Questions

1. Predictions. The majority opinion notes that the FCC asked commenters to submit empirical or statistical evidence on the likelihood that new ownership rules would reduce minority and female ownership, and none were forthcoming. Forward-looking studies are particularly difficult to generate in rapidly changing fields. In the absence of reasonably reliable data, should courts defer to agencies? What else should courts do? What else should agencies do?

2. That Was Quick. After 17 years of back-and-forth between the Commission and the Third Circuit, encompassing four FCC quadrennial reviews that bled into each other, the Supreme Court unanimously made short work of the Third Circuit’s objections and ended the *Prometheus* litigation. And during that 17-year period, the competitive landscape for the relevant media entities changed dramatically. Is there a lesson to be learned in this extensive process? That a court should be hesitant to interfere with agencies’ decisions in fast-moving fields, even if the court thinks the agency may have erred? That an agency should be more responsive to courts, even if the agency does not believe it can gather the data the court requests? That the Supreme Court should have granted certiorari in one of the earlier petitions and thus weighed in earlier?

3. § 202(h) and Minority/Female Ownership. Consider Justice Thomas’s contention that § 202(h) of the 1996 Act does not require consideration of minority and female ownership. Should the FCC treat ownership diversity as a proxy for viewpoint diversity? Should it treat ownership diversity as an important goal in its own right? Should it ignore ownership diversity? This relates to the materials in §5.B.3 of the casebook.

CHAPTER 11

Antitrust and Merger Review

Insert on page 632 after note 3:

4. The Short Life of a Merger. In 2021, less than three years after acquiring Time Warner, AT&T stated that it wanted to refocus on broadband and planned to spin off WarnerMedia (as it had been renamed) and merge its assets with those of media company Discovery, Inc. *See* Jon Brodtkin, AT&T to Spin off WarnerMedia, Basically Admitting Giant Merger Was a Mistake (May 17, 2021) <https://arstechnica.com/tech-policy/2021/05/att-to-spin-off-warnermedia-will-try-to-act-like-a-telecom-company-again>. Thus the vertical integration of AT&T and WarnerMedia proved short-lived. Does this shed any light on, or change, any of the legal issues at play in the AT&T/Time Warner merger?

§11.A.8. T-Mobile/Sprint

For the first two decades of the 21st century, there were four major mobile wireless service providers in the United States—Verizon, AT&T, Sprint, and T-Mobile. In 2011, AT&T and T-Mobile announced that AT&T would acquire T-Mobile for \$39 billion. AT&T's market share was 32.4%, and T-Mobile's was 10.6%. By comparison, Verizon had a 33.8% market share, Sprint had 15.6%, and all others combined had 7.4%. The prospect of consolidation from four to three major competitors (two of which would dominate the third) led the Department of Justice to sue to block the merger, and the FCC to decline to approve it in time for the merger to be completed. So in late 2011 the merger was abandoned. There was a silver (or perhaps green) lining for T-Mobile, however: it had negotiated a break-up fee of \$3 billion in cash plus spectrum worth another \$3 billion.

In the years afterward, there were rumors of negotiations toward a possible merger between T-Mobile and Sprint, and in 2018 the two companies agreed to merge. By that time, Sprint and T-Mobile had switched places in terms of market share (T-Mobile had a 17.5% market share and Sprint had a 12% market share), but Verizon and AT&T's market shares were similar to those noted above. So this was another merger from four major competitors to three, but this time it was the third and fourth biggest companies merging. The DOJ sued to block the merger, but it (along with several states) reached an agreement with T-Mobile and Sprint (discussed in the opinion below) on a set of remedies that, they contended, would allow for a merger that would not harm competition. A different group of states was not satisfied with this agreement and brought suit alleging that the merger would violate § 7 of the Clayton Act, 15 U.S.C. § 18. That case proceeded to trial in a federal district court. The opinion below was the final word on these states' challenge. After the opinion below was issued, the states did not pursue an appeal and the merger proceeded.

NEW YORK V. DEUTSCHE TELEKOM AG

439 F.Supp.3d 179 (S.D.N.Y. 2020)

MARRERO, Senior District Judge:

Plaintiffs, the States of New York, California, Connecticut, Hawaii, Illinois, Maryland, Michigan, Minnesota, Oregon, and Wisconsin, the Commonwealths of Massachusetts, Pennsylvania, and Virginia, and the District of Columbia (collectively, Plaintiff States), acting by and through the respective Offices of their Attorneys General, brought this action against Deutsche Telekom AG (DT), T-Mobile US, Inc. (T-Mobile), Softbank Group Corp. (Softbank), and Sprint Corporation (Sprint, and collectively with DT, T-Mobile, and Softbank, Defendants) seeking to enjoin the proposed acquisition of Sprint by T-Mobile (the Proposed Merger). Plaintiff States claim that the effect of the Proposed Merger would be to substantially lessen competition in the market for retail mobile wireless telecommunications services (the RMWTS Market or RMWTS Markets), in violation of Section 7 of the Clayton Act, codified at 15 U.S.C. Section 18 (Section 7). Defendants counter that the Proposed Merger would in fact increase competition in the RMWTS Market and that Plaintiff States have thus failed to state a claim for relief.

Weighing the evidence in the trial record, the court rejects Plaintiff States' objections on three essential points. First, the court is not persuaded that Plaintiff States' prediction of the future after the merger of T-Mobile and Sprint is sufficiently compelling insofar as it holds that [the merged firm (New T-Mobile)] would pursue anticompetitive behavior that, soon after the merger, directly or indirectly, will yield higher prices or lower quality for wireless telecommunications services, thus likely to substantially lessen competition in a nationwide market. Second, the court also disagrees with the projection Plaintiff States present contending that Sprint, absent the merger, would

continue operating as a strong competitor in the nationwide market for wireless services. Similarly, the court does not credit Plaintiff States' evidence in arguing that DISH would not enter the wireless services market as a viable competitor nor live up to its commitments to build a national wireless network, so as to provide services that would fill the competitive gap left by Sprint's demise. Accordingly, the court concludes that judgment should be entered in favor of Defendants and Plaintiff States' request to enjoin the Proposed Merger should be denied.

I. FINDINGS OF FACT

C. COMPETITION IN THE RMWTS MARKET

Service providers in this dynamic and rapidly changing market can be divided broadly into two categories: those which have built and operate their own mobile networks (Mobile Network Operators, or MNOs), and those which lease [Radio Access Network (RAN)] access from the MNOs (Mobile Virtual Network Operators, or MVNOs). Notable competitors from both categories are described further below, as well as potential RMWTS Market entrant DISH Network Corporation (DISH).

1. Mobile Network Operators

a. Verizon and AT&T

There are four MNOs with nationwide mobile wireless telecommunications network infrastructure, which serve a substantial majority of the United States population: Verizon Communications, Inc. (Verizon), AT&T Inc. (AT&T), T-Mobile, and Sprint. Verizon and AT&T are the largest MNOs, with each approaching roughly one hundred million or more subscribers. Both earn revenues of over \$4 billion and have significant spectrum portfolios, which they have leveraged in developing their mobile networks. Their networks have consequently developed a reputation for reliability and high quality, but their prices also tend to be higher than those of competitors, including T-Mobile and Sprint.

b. T-Mobile

T-Mobile is the third largest MNO, currently serving approximately 70 to 80 million subscribers and earning revenues of approximately \$2–3 billion. The evidence at trial suggests that T-Mobile has seen remarkable success since 2011, transforming from an MNO with serious spectrum limitations and financial constraints to an aggressive competitor that has taken market share from the other three MNOs and delivered consumer benefits through numerous innovative offerings.

c. Sprint

Sprint is the fourth largest MNO, serving approximately 40 million subscribers and earning revenues of just under \$2 billion. Unlike T-Mobile, Sprint's trajectory over the past decade has been largely downward, as it has lost subscribers and been eclipsed by T-Mobile as the third largest MNO. Due in part to several questionable technological choices, Sprint's network is poorer in quality than those of its competitors and its brand image is correspondingly poor. Sprint has also struggled financially, failing to earn net income for eleven straight years until 2017. MNOs sell mobile wireless services either under their own brand names or through subsidiaries, depending on whether their customers pay in arrears (postpaid customers) or in advance of receiving services (prepaid customers). While all four MNOs provide postpaid services under their own brand names, they provide prepaid services through subsidiaries. Since acquiring a competitor named MetroPCS via merger in 2013, T-Mobile offers prepaid services under its Metro by T-Mobile (Metro) brand. Sprint offers prepaid services under the brand names Boost Mobile, Virgin Mobile (collectively with Boost Mobile, Boost), and Assurance Wireless. Despite the issues regarding Sprint's brand perception noted above, Boost has enjoyed remarkably positive consumer perception. Apart from the manner of payment, prepaid customers form a distinct segment of the RMWTS Market because they tend to be relatively price-conscious; prepaid subscribers' household incomes range from approximately \$20,000 to \$45,000, and prepaid subscribers are more likely to have subprime credit or be more cash-constrained than postpaid subscribers.

2. Mobile Virtual Network Operators

The second major category of service providers in the RMWTS Market comprises the MVNOs, which differ from MNOs primarily in that they do not have the RAN necessary to support the provision of RMWTS. Although MVNOs compete with MNOs for subscribers in the RMWTS Market, their lack of proprietary RANs means they must simultaneously lease mobile wireless network access from MNOs. In one sense, MNOs can be considered wholesalers of their network access, which MVNOs then resell to their retail subscribers.

3. DISH as a Potential Market Entrant

Beyond the current carriers in the RMWTS Market, satellite television service provider DISH has expressed interest in entering the wireless market since at least 2012. Over the past eight years, DISH has amassed a large portfolio of spectrum, roughly equivalent in size to that of Verizon, through a series of private transactions and purchases at FCC auctions. DISH is also financially stable, being a successful provider of consumer services in the satellite TV industry.

Despite having expressed desire to enter the RMWTS Market, DISH has not done so to date. Because DISH is currently not using its large spectrum holdings, industry figures such as [former Sprint chief executive officer, Marcelo] Claure have previously cast doubt on the sincerity of DISH's expressed intent and suggested that DISH is speculatively hoarding spectrum in the hopes of later selling it to companies such as T-Mobile and Sprint at a premium. DISH has also been accused of questionable compliance with prior commitments it has made to the FCC, with some of the same industry figures suggesting that DISH might build only a nominal wireless network and thus barely fulfill its regulatory commitments.

D. THE PROPOSED MERGER

T-Mobile has large low-band holdings, which allow it relatively broad coverage. Sprint has large mid-band holdings, which give Sprint extra capacity to carry network traffic as the era of 5G approaches. Both parties envisioned that New T-Mobile would have comparable scale to its two largest competitors, AT&T and Verizon.

E. REVIEW OF AND CHALLENGES TO THE PROPOSED MERGER

1. Federal Regulatory Review

As primary regulator of the telecommunications industry, in June 2018 the FCC began assessing the Proposed Merger with respect to various public interest factors including the merger's potential competitive impact. Throughout an extensive process spanning over a year, the FCC observed that while the unconditioned Proposed Merger could accelerate and broaden the use of 5G across the United States and thus improve the quality of mobile wireless services, the FCC remained concerned about the merger's potential impact on price-conscious consumers in densely populated areas.

T-Mobile and Sprint accordingly made several commitments to the FCC in May 2019 aimed at addressing its concerns. Sprint committed to divesting its Boost business, including its retail stores, employees, and current subscribers, to an independent buyer, and T-Mobile committed that New T-Mobile would provide the independent buyer of Boost with wholesale rates and terms sufficient to ensure it could aggressively compete in the market. Among many other conditions, Sprint and T-Mobile committed that New T-Mobile would: provide 5G service to 97 percent of the United States population within three years and 99 percent within six years; provide 5G service with speeds of at least 50 megabits per second (mbps) to 75 percent of the same population and speeds of at least 100 mbps to 63 percent within three years; and provide 5G service to 85 percent of the United States rural population within three years, with at least 66 percent receiving speeds of 50 mbps and 55 percent receiving speeds of 100 mbps. They committed to achieve even more ambitious targets with respect to each metric within six years. Sprint and T-Mobile committed that New T-Mobile would pay up to \$2.4 billion in fines if it failed to fulfill their promises over the three- and six-year timeframes. After several months of further consideration, the FCC ultimately concluded on October 16, 2019 that the Proposed Merger as conditioned would not substantially lessen competition and would be in the public interest.

The DOJ's Antitrust Division concurrently began reviewing the Proposed Merger in 2018 to determine whether it would violate Section 7. The DOJ met with several interested parties throughout this process, including the merging companies, cable MVNOs, and DISH. In particular, the DOJ began to discuss with DISH Chairman [Charles] Ergen whether DISH might be amenable to involvement in any proposed remedies to the unconditioned transaction. On July 26, 2019, the DOJ and multiple other states filed a complaint in the United States District Court for the District

of Columbia, alleging that the effect of the Proposed Merger would be to substantially lessen competition in the RMWTS Market unless additional relief were granted.

Along with its complaint, the DOJ filed a proposed final judgment containing numerous remedies that it contended would preserve the competition that would otherwise be lost as a result of the Proposed Merger. The DOJ further declared that the proposed final judgment would provide substantial long-term benefits to American consumers by making available substantial amounts of unused or underused spectrum in the form of 5G networks. The DOJ's proposed remedies provided that Sprint would divest to DISH all of its spectrum holdings in the 800 megahertz (MHz) band, as well as Boost and its assets and subscribers. New T-Mobile would then sign an MVNO agreement providing DISH with low wholesale rates to use its network, which rates would decline according to a predefined formula as New T-Mobile's capacity increases. An independent monitor would also be appointed to ensure that New T-Mobile would not hinder DISH's ability to use its network. Additionally, DISH would use an interconnected mobile core that would allow it to transition its customers away from the New T-Mobile network to a purely 5G network that DISH would be required to build, and DISH would have the option to use cell sites that New T-Mobile would otherwise decommission for the construction of its 5G network. DISH committed to the FCC that if it did not deploy a nationwide 5G network covering at least 70 percent of the population by June 2023, it would pay up to \$2 billion in fines and divest up to \$12 billion worth of spectrum.

2. Plaintiff States' Challenge

Like the federal regulators, several state attorneys general scrutinized the Proposed Merger to assess its likely effect on competition in the RMWTS Market. On June 11, 2019, Plaintiff States and the States of Colorado, Mississippi, Nevada, and Texas filed the instant action, alleging that the Proposed Merger would substantially lessen competition in the RMWTS Market unless enjoined.

II. CONCLUSIONS OF LAW

Courts generally assess Section 7 cases through a three-part burden-shifting framework:

Typically the [plaintiff] establishes a *prima facie* case by showing that the transaction in question will significantly increase market concentration, thereby creating a presumption that the transaction is likely to substantially lessen competition. Once the [plaintiff] establishes the *prima facie* case, the [defendant] may rebut it by producing evidence to cast doubt on the accuracy of the [plaintiff]'s evidence as predictive of future anti-competitive effects. Finally, if the [defendant] successfully rebuts the *prima facie* case, the burden of production shifts back to the [plaintiff] and merges with the ultimate burden of persuasion, which is incumbent on the [plaintiff] at all times.

Chicago Bridge & Iron Co. N.V. v. FTC, 534 F.3d 410, 423 (5th Cir. 2008) (internal citations omitted).

A. PLAINTIFF STATES' PRIMA FACIE CASE

Plaintiff States may establish a presumption that the Proposed Merger would be anticompetitive by demonstrating that it would result in undue market concentration in an area of effective competition. This area "must be determined by reference to a product market (the 'line of commerce') and a geographic market (the 'section of the country')." *Brown Shoe Co. v. United States*, 370 U.S. 294, 324 (1962).

1. The Relevant Product Market

"A relevant product market consists of 'products that have reasonable interchangeability for the purposes for which they are produced—price, use and qualities considered.'" *PepsiCo, Inc. v. Coca-Cola Co.*, 315 F.3d 101, 105 (2d Cir. 2002) (quoting *United States v. E.I. du Pont de Nemours & Co.*, 351 U.S. 377, 404 (1956)).

The parties in this case agree that the relevant product market is the RMWTS Market, but they disagree on various details regarding what exactly the RMWTS Market encompasses. Their disputes reduce to one major point: whether MVNOs should be attributed market shares, or whether MVNOs are not independent competitors, the subscribers or revenues of which should thus be attributed to the MNOs from which they lease network access.

[T]he court is persuaded that MVNOs should not be considered independent competitors in the RMWTS Market, and it adopts Plaintiff States' position that MVNO shares should thus be attributed to the MNOs from which the MVNOs lease network access. The weight of the evidence at trial suggested that MVNOs could not restrain the pricing behavior of MNOs to any truly significant degree. MVNOs have a miniscule share of the RMWTS Market overall; for example, even though Defendants cite Comcast as one of the fastest growing MVNOs in the market, it nevertheless has only two million customers (measured by connected lines) in a market of over 300 million lines. Even as the smallest nationwide MNO, Sprint dwarfs this figure with its roughly 40 million lines.

That MVNOs necessarily rely on MNOs for use of the MNOs' mobile wireless networks further demonstrates their limited ability to constrain the MNOs' market power.

MNOs may also limit MVNOs' ability to compete as a condition of leasing their network services. Comcast's Reseller Agreement, for example, allows it to offer wireless services only as part of a bundle package with its non-wireless services, which eliminates its ability to attract customers who are uninterested in those other services.

That MVNOs pay MNOs for network access also limits their ability to compete independently. Paying wholesale fees to MNOs necessarily cuts the profits that an MVNO could receive from a retail customer, and those wholesale fees allow MNOs to generate their own revenues from MVNO subscribers' use of their networks.

Finally, MNO control of RAN access affects various aspects of consumer experience.

Considering the totality of the evidence, the court concludes that MVNOs face significant constraints on their ability to compete independently with MNOs and thus lack the ability to significantly constrain the MNOs.

Though the court concludes that MVNOs lack the ability to substantially constrain MNOs and thus should not be attributed market shares, MVNOs do undoubtedly compete with MNOs in some ways and should not be altogether excluded from broader consideration. Despite low overall market shares, the cable MVNOs have collectively attracted roughly one-third of all new wireless service subscribers over the last two years, signaling their significant growth.

2. The Relevant Geographic Markets

[T]he parties agree that there is a national RMWTS Market, but disagree on whether there are additional local markets that correspond to the Cellular Market Areas (CMAs) defined by the FCC for licensing purposes. Plaintiff States argued throughout trial for the existence of local markets because the quality of mobile wireless network service varies at a local geographic level and because carriers market and advertise locally. Defendants responded at trial that MNOs price nationally, make network engineering decisions nationally, and advertise in large part on a national scale. Local competition is for Defendants incidental to national competition, rather than probative evidence of discrete local markets.

The court concludes that, based on controlling case law and the weight of the evidence adduced at trial, there are local RMWTS Markets which should be considered in determining the relevant geographic market here. As a practical matter, it seems highly unlikely that a consumer in a locality like New York City could simply turn to anywhere else in the nation, such as California, to obtain wireless services. On the contrary, consumers likely rely primarily on local services in the area in which they live and/or work.

3. Market Share Analysis

[Plaintiff's expert] calculated that New T-Mobile would have a national market share of either 37.8 percent if measured by subscribers or 34.4 percent if measured by revenues, and the national Herfindahl-Hirschman Index (HHI) would increase by 679 points for a total HHI of 3186. The shares are higher in certain local markets. For example, the total HHIs for the local CMAs corresponding to Los Angeles and New York would be as high as 4158 and 4284 respectively, and market share in Los Angeles would be as high as 57 percent. These figures are more than enough to establish a presumption that the Proposed Merger would be anticompetitive.

It bears repeating, however, that market shares and HHIs establish only a presumption, rather than conclusive proof of a transaction's likely competitive impact.

B. DEFENDANTS' REBUTTAL CASE

Defendants' rebuttal evidence may be broadly divided into three categories: (1) evidence that the efficiencies arising from the Proposed Merger will cause New T-Mobile to compete more vigorously with its rivals in the RMWTS Markets; (2) evidence that Sprint is a weakened competitor that is not likely to continue competing vigorously in the RMWTS Markets; and (3) evidence that the DOJ and FCC review of and remedies to the Proposed Merger, and particularly their collective efforts to establish DISH as a new vigorous competitor in the RMWTS Markets, ameliorate any remaining concerns of anticompetitive effect. The court addresses each category of evidence in turn and concludes that while no one category serves as the sole basis to rebut Plaintiff States' prima facie case, Defendants have satisfied their burden of rebuttal under the totality of the circumstances.

1. Efficiencies of the Proposed Merger

Defendants project that the Proposed Merger would result in a variety of efficiencies that would be passed on to consumers through more aggressive service offers, leading to annual consumer welfare gains that will range from \$540 million in 2020 to \$18.17 billion by 2024. Defendants' claimed efficiencies include: (1) more than doubling the standalone firms' network capacity, which is projected to result in 15 times the speeds now offered by the four major MNOs to consumers; (2) saving \$26 billion in network costs and another \$17 billion in other operating costs; (3) increasing network coverage to strengthen competition in underserved markets; and (4) accelerating the provision of 5G service. Defendants' bottom-line conclusion is that they will use these advantages to lower prices and thus compete more effectively against AT&T and Verizon. Even if the court assumed that the efficiencies cited by Defendants would not, absent other circumstances, rebut Plaintiff States' prima facie case, the court concludes that the efficiencies are sufficiently verifiable and merger-specific to merit consideration as evidence that decreases the persuasiveness of the prima facie case.

The primary efficiency Defendants claim is the increased capacity that New T-Mobile would gain from adding Sprint's mid-band spectrum and 11,000 cell sites to T-Mobile's network. T-Mobile argues that these cell sites and spectrum would provide it with enough additional capacity to meet the market's projected growth in data consumption and thus avoid the erosion in quality of service that would result from saturating its existing capacity. The undisputed evidence at trial reflects that combining Sprint and T-Mobile's low-band and mid-band spectrum on one network will not merely result in the sum of Sprint and T-Mobile's standalone capacities, but will instead multiply the combined network's capacity because of a technological innovation referred to as "carrier aggregation" and certain physical properties governing the interaction of radios. Not only would this excess capacity allow New T-Mobile to support additional subscribers at reduced marginal costs, it would improve the speeds at which current subscribers could use data services. Defendants argue that this is particularly important in a world where data-intensive streaming video now accounts for over 50 percent of the traffic on T-Mobile's network.

Apart from capacity and cost benefits, Defendants claim that New T-Mobile will provide better coverage than Sprint customers currently receive because T-Mobile's low-band spectrum covers a broader range and penetrates through buildings more effectively than Sprint's mid-band holdings can. Having a broad range of spectrum would allow New T-Mobile to dedicate each band of spectrum to its best use; it could prioritize the use of low-band in areas that mid-band and [millimeter wave (mmWave)] could not reach, while instead prioritizing the other two bands in areas correspondingly closer to the cell sites.

Defendants further claim that the Proposed Merger would accelerate mobile wireless carriers' provision of 5G service in the United States.

[T]he record evidence confirm[s] that there is substantial merit to Defendants' claims that the efficiencies arising from the Proposed Merger will lead T-Mobile to compete more aggressively to the ultimate benefit of all consumers, and in particular the subscribers of each of the four major competitors. Sprint customers would benefit from greater coverage, T-Mobile customers would benefit from greater speeds and 5G service sooner. And even AT&T and Verizon customers would benefit insofar as New T-Mobile continued T-Mobile's past practice of pushing AT&T and Verizon to adopt pro-consumer offerings.

While Plaintiff States do not deny that generally the Proposed Merger could generate efficiencies, they respond that these efficiencies are not cognizable because they are neither merger-specific nor verifiable. The court now considers both grounds pressed by Plaintiff States, concluding that these arguments lack sufficient merit to warrant disregard of Defendants' claimed efficiencies.

a. Merger Specificity

Efficiencies are merger-specific if they “cannot be achieved by either company alone,” as otherwise those benefits could be achieved “without the concomitant loss of a competitor.” *FTC v. Penn State Hershey Medical Center*, 838 F.3d 327, 348 (3d Cir. 2016) (internal quotation marks omitted). In this regard, the DOJ and FTC consider “[o]nly alternatives that are practical in the business situation faced by the merging firms” and “do not insist upon a less restrictive alternative that is merely theoretical.” United States Department of Justice and the Federal Trade Commission, *Horizontal Merger Guidelines* § 10 (Aug. 19, 2010).

Plaintiff States argue that Defendants’ claimed efficiencies are not merger specific because Defendants have alternate means of increasing capacity and coverage, and because both Sprint and T-Mobile will inevitably provide 5G services on a nationwide basis. In particular, Plaintiff States emphasize that Defendants can alternatively increase capacity by acquiring spectrum through auctions and private transactions.

Auctions present multiple issues for T-Mobile and Sprint. They are infrequent, their timing is uncertain, and it can take years for a contemplated auction to occur. There is no guarantee that Sprint or T-Mobile could win a substantial amount of spectrum at these auctions because AT&T and Verizon can leverage their higher market capitalization to dominate the auctions with high bids. Moreover, the spectrum that the FCC chooses to auction may not practically address the merging parties’ needs. For example, while Sprint needs low-band spectrum, there have been no such auctions since 2015 and there are no future low-band auctions anticipated at this time.

Private transactions are certainly possible, as T-Mobile has consistently acquired spectrum through either this method or auctions in every year since 2013. But private transactions usually entail small amounts of spectrum and depend upon counterparties’ willingness to part with their spectrum. Opportunities to acquire the desired bands of spectrum in any significant measure are thus infrequent. While T-Mobile or Sprint could theoretically spend another decade negotiating and acquiring the required spectrum bit-by-bit, doing so would clearly not allow for anywhere near the efficiencies of the Proposed Merger in anywhere near the same timeframe.

Finally, even assuming that the standalone firms could acquire some additional capacity through auctions or private transactions, that capacity would not nearly approach the capacity that would result from combining the standalone firms’ broad spectrum assets on one network. The combination of each firm’s spectrum creates unused capacity without the need for, and without excluding the possibility of, New T-Mobile acquiring additional spectrum in the future. And because of the multiplicative effect associated with combining spectrum on one set of infrastructure, New T-Mobile’s acquisition of additional spectrum would inherently create more capacity than if either standalone firm acquired the exact same amount of spectrum.

With respect to coverage, Plaintiff States proposed at various points during trial that gaps in coverage could be filled by small cells through so-called “densification” projects. This is an interesting and potentially useful solution in more limited contexts, but its benefits are not comparable to those possible under the Proposed Merger.

Plaintiff States are correct that both Sprint and T-Mobile will provide 5G service without the Proposed Merger. But they fail to adequately acknowledge that the standalone firms’ 5G networks will be materially more limited in their scope and require a longer timeframe to establish.

In sum, it may be that Defendants are not entirely incapable of improving their networks and services through means other than the Proposed Merger. But none of those alternatives appear reasonably practical, especially in the short term, and neither company as a standalone can achieve the level of efficiencies promised by the Proposed Merger. Accordingly, the court concludes that Defendants’ claimed efficiencies satisfy the merger-specific test.

b. Verifiability

[T]he court concludes that Defendants’ proposed efficiencies are cognizable and increase the likelihood that the Proposed Merger would enhance competition in the relevant markets to the benefit of all consumers. However, mindful of the uncertainty in the state of the law regarding efficiencies and Plaintiff States’ pertinent criticisms, the court stresses that the Proposed Merger efficiencies it has recognized constitute just one of many factors that it considers and do not alone possess dispositive weight in this inquiry.

2. Sprint's Status as a Weakened Competitor

Another consideration that weakens the strength of Plaintiff States' prima facie case is Sprint's decreasing competitive relevance, which owes to demonstrably poor network quality and numerous financial constraints. Evidence that a merging party is a "weakened competitor" that cannot compete effectively in the future may serve to rebut a presumption that the merger would have anticompetitive effects.

Assuming that the weakened competitor defense is applicable only in narrow circumstances, the court concludes that the Proposed Merger nonetheless presents a rare case. The mobile wireless network is the foundation of mobile wireless telecommunications services, and Sprint's network and product offerings have been distinguished for years for poor operational quality and negative customer perception. . . . Sprint's financial difficulties hamper its ability to invest in its network, which in turn prolongs its poor network quality and hurts its ability to generate the revenues necessary to improve its financial condition.

a. Sprint's Network Quality and Customer Perception

For roughly the past 15 years, Sprint has made multiple ill-advised technological and business decisions which resulted in a chronically underdeveloped network that is inconvenient for consumers to use. For example, Sprint's choice to use a technology standard called CDMA instead of the GSM standard widely adopted by the rest of the industry meant that many consumers would have to change their mobile handsets if they switched to Sprint's network, and, because of this decision, Sprint's customers remain among the exceptions who cannot use voice and data services simultaneously. Sprint also did not realize anticipated technological and financial benefits from its merger with market competitor Nextel, which further set back its attempts to build a strong network. Poor technological decisions such as these were exacerbated by a historical trend of low capital expenditures on Sprint's network.

The effects of Sprint's low network investments and poor financial position have expanded over time, making meaningful network investment seem a less and less viable prospect.

b. Sprint's Financial Difficulties

Improving and maintaining network quality in the long run inevitably requires large amounts of investment and ongoing operational expenses. Sprint's financial situation, however, remains poor and hamstringing any meaningful investment efforts. For example, Sprint's most effective way of reducing its financial difficulties to date has been through cost cutting efforts; unfortunately, these efforts required the layoffs of many network engineers and resulted in increased customer complaints regarding network quality.

c. Other Competitive Means Available to Sprint

Finally, Plaintiff States argue that Sprint's issues could be solved through competitive means other than the Proposed Merger. As an initial matter, they note that Sprint has started investing comparatively more in its network and that network perception usually lags behind actual network performance by up to two years. Plaintiff States add that Sprint is making technological changes that have resulted in improved speeds, suggesting that its network perception may improve within the next two years and possibly spur a reversal of fortune.

The court cannot place much confidence in these suggestions. Sprint's network perception has remained low for the past three years and only continues to worsen, even after Sprint began to increase its network investments and aggressively compete to attract customers. The evidence at trial also casts doubt on the notion that Sprint is adequately investing in its network now, such that consumer perceptions might soon justifiably improve. Sprint's network investments still fall far short of the levels needed to match Sprint's competitors.

The court is thus substantially persuaded that Sprint does not have a sustainable long-term competitive strategy and will in fact cease to be a truly national MNO.

3. Federal Agency Review and DISH as a New Entrant

a. FCC and DOJ Review and Remedies

Prior to and during the pendency of this action, the FCC and DOJ each heavily scrutinized the Proposed Merger and considered its likely effect on competition. Those agencies' conditional approval of the Proposed Merger does not immunize it from Plaintiff States' antitrust challenge or this court's judicial scrutiny. Nevertheless, the reality remains that the court must now assess the Proposed Merger as conditioned by both regulators after lengthy review.

Not only have the FCC and DOJ conditioned the transaction before the court, the court will accord their views some deference. Where federal regulators have carefully scrutinized the challenged merger, imposed various restrictions on it, and “stand ready to provide further consideration, supervision, and perhaps invalidation of asserted anticompetitive practices. . . . we have a unique indicator that the challenged practice may have redeeming competitive virtues and that the search for those values is not almost sure to be in vain.” *Broadcast Music, Inc. v. Columbia Broadcasting Sys., Inc.*, 441 U.S. 1, 13 (1979). Indeed, the Supreme Court has looked to the views of federal regulators on multiple occasions for assistance in conducting its Section 7 analysis. As Plaintiff States note, however, the views of the FCC and DOJ cannot simply be adopted entirely at face value, as their assessment of a merger’s legality may be guided by considerations that are outside the scope of Section 7. Ultimately, the court will treat the views of the FCC and DOJ as “informative but not conclusive.” *South Austin Coalition Community. Council v. SBC Communications, Inc.*, 191 F.3d 842, 844 (7th Cir. 1999).

[A]lthough the FCC recognized the potential for the Proposed Merger to increase mobile wireless speeds, accelerate the provision of 5G service, and expand mobile wireless telecommunications services to underserved rural areas, the FCC nevertheless acknowledged that an unconditioned Proposed Merger could have potentially harmful effects in densely populated areas with price-conscious consumers. To mitigate these concerns, the FCC required that T-Mobile commit to providing its promised speed, 5G, and coverage benefits by setting clear targets with associated penalties. And the FCC sought to address the potential harm to price-conscious consumers by requiring the divestiture of the most successful part of Sprint’s business, its prepaid subsidiary Boost, to an independent buyer on terms that would enable that buyer to compete aggressively for the benefit of such price-conscious customers. After extensive review, the DOJ concluded that the Proposed Merger, if unconditioned, could substantially lessen competition in the RMWTS Market. In order to achieve the benefits that the Proposed Merger could provide, the DOJ supplemented the FCC commitments by proposing that Sprint divest Boost to the well-resourced potential entrant DISH, that an independent monitor appointed by DOJ ensure DISH would take advantage of the low wholesale rates provided by an MVNO agreement, and that DISH build out its own 5G network within three years to become a nationwide MNO capable of replacing Sprint.

Plaintiff States point out that some of the conditions contemplated by the FCC and DOJ, such as the MVNO agreement and transfer of spectrum licenses, have yet to receive formal approval. The court declines to assume at present that the FCC and DOJ will, either through their regulatory review processes or lax enforcement, frustrate the conditions that they negotiated themselves over a period of 15 months.

Having been tasked with independently reviewing the legality of the Proposed Merger, the court is not bound by the conclusions of these regulatory agencies. Similarly, the court does not simply adopt their conclusions wholesale. Nonetheless, mindful that the agencies are “intimately familiar with this technical subject matter, as well as the competitive realities involved,” the court treats their views and actions “as persuasive and helpful evidence in [analyzing] the competitive effect of this merger” as conditioned by the factors described below. *United States v. Manufacturers Hanover Trust Co.*, 240 F. Supp. 867, 881, 886 (S.D.N.Y. 1965).⁴

b. Market Entry by DISH

The DOJ’s efforts to establish DISH as a fourth nationwide MNO and replacement for Sprint comprise the most prominent remedies that contribute substantially to rebutting Plaintiff States’ *prima facie* case. . . . [T]he court is persuaded that the presence of DISH as a new entrant will constitute a substantial incentive to competition in the RMWTS Markets.

⁴ The deference that the court accords to the DOJ and FCC turns on their familiarity with the telecommunications industry and their extensive conditioning of this particular transaction, rather than on any notion that they represent the national public interest more so than any state. As Plaintiff States and amicus curiae State of Washington note, allowing states to bring Section 7 actions is clearly “an integral part of the congressional plan for protecting competition.” *California v. American Stores Co.*, 495 U.S. 271, 284 (1990). What deference the court accords to the federal regulators should not be taken as a denigration of Plaintiff States’ familiarity with the industry or their relative ability to vindicate the public interest they represent more generally.

i. Sufficiency of DISH's Entry

When DISH enters the market, it will start as an MVNO utilizing New T-Mobile's network to provide services to Boost customers. The divestiture of Boost would be a strong starting point for DISH to compete because of Boost's considerable success in the prepaid segment of the RMWTS Market and the subscribers and assets that DISH would receive: 9.4 million existing Boost customers, Boost's strong brand awareness and high customer satisfaction, 500 Boost employees with experience in the RMWTS Market, and 7,500 retail storefronts. As one court has observed, "[d]ivestiture of an existing business entity might be [relatively] likely to effectively preserv[e] the competition that would have been lost through the merger, because it would have the personnel, customer lists, information systems, intangible assets, and management infrastructure necessary to competition." *United States v. Aetna Inc.*, 240 F. Supp. 3d 1, 60 (D.D.C. 2017) (internal quotation marks omitted).

The Boost divestiture would position DISH well with respect to these numerous factors. Angela Rittgers, a senior vice president at Boost, and DISH Executive Vice President for Corporate Development Thomas Cullen both testified that Boost will continue to operate smoothly under DISH and that Boost's distribution model is already quite similar to that of DISH, which will help accelerate DISH's plans to expand its distribution to areas not currently well covered by Sprint. Boost customers will also use the New T-Mobile network rather than the decidedly poorer-quality Sprint network.

In connection with the Boost divestiture, New T-Mobile must provide DISH with access to its network for seven years at wholesale rates significantly lower than those provided under typical MVNO agreements. Ergen projected that Boost customers would actually pay a lower price under DISH than they currently do as a result of this low wholesale rate, which will also help DISH to focus on building its own network rather than paying the higher costs that an MVNO usually would to access the New T-Mobile network. Ergen added that DISH will also lower prices in anticipation of its transition to an MNO; DISH could recoup any short-term losses from lower prices by attracting subscribers to its own network and thus avoiding the costs associated with use of the New T-Mobile network.

Plaintiff States correctly note that DISH's reliance on New T-Mobile's network during its MVNO phase presents the risk that New T-Mobile may try to hinder DISH's ability to compete effectively. "Courts are skeptical of a divestiture that relies on a continuing relationship[] between the seller and buyer of divested assets because that leaves the buyer susceptible to the seller's actions—which are not aligned with ensuring that the buyer is an effective competitor." *Id.* (internal quotation marks omitted). But here, the DOJ has already prepared multiple means to mitigate this potential conflict. It has appointed a monitor to ensure that New T-Mobile does not limit DISH's ability to use the New T-Mobile network, and it has established a formula that provides the wholesale price to DISH will never increase. On the contrary, DISH's price is designed to decrease as New T-Mobile experiences increases in capacity. Moreover, DOJ remedies provide that New T-Mobile cannot cap the extent to which DISH uses its network over the first three years. Theoretically, there is nothing to stop DISH from filling more than half of New T-Mobile's network capacity. New T-Mobile cannot charge DISH if New T-Mobile customers choose to switch to DISH, either. These arrangements all ensure that DISH could compete with New T-Mobile and other market incumbents on highly advantageous terms upon entry, and that the MVNO agreement will inure far more to DISH's benefit than New T-Mobile's.

ii. Likelihood of DISH's Entry

Throughout trial, Plaintiff States cast doubt on DISH's intent to seriously compete in the RMWTS Market or comply in good faith with its commitments to the DOJ and FCC. They cited several statements made over time by executives of Defendants for the broad point that building a mobile wireless network would be one of many "stupid bluffs" by Ergen, and that he would merely build a "meaningless thin network so that he doesn't get in trouble with the FCC." Plaintiff States suggested that DISH's network would be, in the words of one DT official, "something the lawyers can use, but not something customers can use."

The court is not persuaded that this evidence carries the weight that Plaintiff States ascribe to it. On the contrary, the DOJ and FCC have strongly supported DISH's entry into the market despite being fully aware of these concerns.

Under the commitments made to the FCC, DISH would stand to lose \$2 billion in fines and \$12 billion of spectrum if it fails to deploy a nationwide 5G network covering at least 70 percent of the United States population by June 2023. These potential penalties constitute strong disincentives for DISH to skirt compliance. Moreover, DISH has committed to provide speeds of at least 35 mbps on its network, at least 15,000 5G cell sites, and an average of at least 30 MHz of downlink 5G spectrum across its 5G cell sites in the same timeframe. These undertakings further increase the likelihood that DISH's network will be more than a mere façade.

DISH must also dedicate its 600 MHz spectrum to 5G services by 2023, which is four years earlier than required under its prior FCC interim deadline. This condition suggests that the FCC takes seriously the need to avoid delays and missed deadlines. Considering also the DOJ's extensive review and numerous carefully crafted remedies, which include independent monitoring of compliance by New T-Mobile and DISH, the court is persuaded that the DOJ will similarly be committed to ensuring that DISH takes its obligations seriously.

Moreover, DISH has a great incentive to enter the RMWTS Market given its increasing importance to consumers and its potential profitability. The DOJ appears to have favored DISH as a new entrant at least in part because DISH could substantiate its alleged interest through proof of its extensive research and detailed preparations for market entry, exemplified by the depth of DISH'S Request for Proposals for a virtualized 5G network.

DISH now has all of the incentives and necessary resources to compete in the RMWTS Markets. And it has received favorable remedies that strengthen its ability to do so, and is subject to severe potential penalties, at a time when the industry is transitioning to a new technological standard. Accordingly, the court is persuaded that DISH will likely take advantage of its opportunity to enter the RMWTS Markets, first building out its 5G network in dense cities and leveraging Boost's positive brand image to cater to price-conscious customers, and shortly thereafter expanding nationwide to challenge the dominance of the incumbent MNOs more broadly.

The court consequently concludes that the FCC and DOJ remedies, and particularly those designed to ensure that DISH becomes an aggressive fourth national MNO, significantly reduce the concerns and persuasive force of Plaintiff States' market share statistics. Taking this evidence together with the evidence that the Proposed Merger's efficiencies will cause T-Mobile to continue competing vigorously, and that Sprint's ability to compete in the RMWTS Markets will continue to decrease without the Proposed Merger, the court concludes that Defendants have carried their burden to rebut Plaintiff States' prima facie case. Though Plaintiff States' post-merger market share figures are undeniably high, the combined weight of the three different forms of rebuttal evidence Defendants presented nevertheless demonstrates that the concentration and market share statistics associated with the Proposed Merger do not accurately reflect the variety of ways in which the Proposed Merger is not likely to substantially lessen competition. Accordingly, the court turns to consider whether Plaintiff States have satisfied their ultimate burden of proof through evidence beyond concentration and relevant market share data.

C. ADDITIONAL EVIDENCE OF ANTICOMPETITIVE EFFECTS

Defendants' rebuttal of Plaintiff States' prima facie case now leaves Plaintiff States with the ultimate burden of proof. Plaintiff States attempt to carry this burden by showing that: (1) the Proposed Merger would increase the likelihood that the three remaining MNOs would effectively agree, whether explicitly or merely through mutual awareness, that competing less strenuously and thus delivering fewer consumer benefits would be in their collective interests (coordinated effects of the merger); and (2) the lost competition between Sprint and T-Mobile would cause New T-Mobile to charge higher prices than T-Mobile ordinarily would have without the merger, regardless of its remaining competitors' actions (unilateral effects of the merger). As evidence that these two effects are likely, Plaintiff States relied primarily on the testimony of [Plaintiff's expert] as supplemented by various emails and internal presentations suggesting that during the course of merger discussions, T-Mobile and Sprint considered the possibility that the Proposed Merger might create opportunities to charge higher prices or otherwise decrease competition.

The court concludes that neither [type of effect] is reasonably likely, particularly in the short term. [E]ach type of effect would require that T-Mobile reverse course and effectively disestablish the business strategy and reputation it has developed over the past decade, even though the Proposed Merger gives it the ability to simply continue that business strategy on a greater scale and thus compete more effectively with the current market leaders AT&T and Verizon. The likelihood of coordinated or unilateral effects is further diminished by Sprint's decline and DISH's entry into the RMWTS Markets.

D. PARTICULARITIES OF THE WIRELESS TELECOMMUNICATIONS INDUSTRY

In rejecting Plaintiff States' theory forecasting decreased competition and potential harm to consumers resulting from coordinated and unilateral effects of the Proposed Merger, the court also took into account another consideration that would render it unlikely that the Proposed Merger would produce such anticompetitive consequences: the particularities of the wireless telecommunications industry and its exceptional impact both on the entire population of the country and on the national economy. As elaborated below, these circumstances create unusual procompetitive pressures and incentives while constraining anticompetitive forces.

1. The RMWTS Market is Exceptional

Commercial markets vary widely according to multiple business criteria, including, for example, product origin, the range of manufacturers and consumers, the function and performance standards of the goods and services and their quality and price. Of the basic features in which product and service markets fundamentally differ, the court here examines two considerations that provide essential context for resolution of this litigation, and that thus warrant detailed review: the complexity and dynamism that characterize the RMWTS Markets.

a. Complexity of the Relevant Market

Regarding complexity, some product markets may be classified as relatively simple. The goods and services these markets encompass are unitary or homogeneous, in that they are easily identifiable and undifferentiated by technological or commercial integration with other products or services on which their operation and delivery necessarily depend. By virtue of the relatively simple structure, product pricing in such markets tends to be more transparent, rendering coordinated and unilateral effects on prices and quality more likely to result from a merger.

Other markets consist not of a single item, but of a more intricate product encompassing multiple components which can be packaged, marketed, and bought and sold together with other interrelated goods and services with which they are inseparably bound. In such markets product pricing tends to be relatively non-transparent, insofar as retail price is fixed not on the basis of one item or feature, but concordant with multiple variables that may change according to product or service characteristics such as speed, quality, efficiency, and reliability. For this reason, unilateral and coordinated pricing strategies are likely more difficult to achieve in complex markets.

Retail mobile wireless telecommunications services illustrate a prototypical complex market. As furnished to and acquired by consumers, wireless service does not stand alone, but comes integrally connected with several goods and services furnished by other interrelated industries. Specifically, the product comes inextricably tied to the electronic hardware devices supplied by the cellular phone and computer industries that consumers use for voice and non-voice communication, as well as for imaging, messaging, data transmission and storage, and Internet access. Moreover, the cellular hardware carries the operational material created by providers of software content such as video and audio programming and data accessed by phones and similar devices. Plainly stated, the modern wireless telecommunications market would not exist without its complex interdependence on the mobile devices and software programs produced by other distinct industries. On that basis, cell phone service can be transmitted for voice or non-voice communication by itself through the wireless company networks, or it could be bundled with various products and services that some telecommunications companies deliver by means of other technologies, such as cable or satellite.

b. Dynamics of the Relevant Market

Turning to dynamics, in some industries the composition of goods and services tends to be static over time, and the markets' competitive structure and environment generally change little. In these markets, how business is transacted, how the relevant product is made, financed, and advertised, and the prices at which it is bought and sold, as well as who comprises its producers and consumers—in other words, the demographics and elasticity of the trade all remain relatively stable from one business cycle to the next. Markets for items such as beer, paper clips, and tuxedos, to cite a few clear examples, would fall into this category.

At the opposite band of the dynamics spectrum are markets in which the essential qualities of the goods and services can shift quickly from year to year. Such change may be propelled by: rapid and constant innovations in technology and product lines; substantial variations in consumer demand for the product; the makeup of the item's buyers and sellers; design and production costs; and ultimately by the competitive features and strategies industry participants adopt concerning pricing, quality, and marketing. By virtue of such variability, in complex and dynamic markets current product lines and prevailing business models could be rendered obsolete within a relatively brief time frame.

d. Dynamics of the Wireless Telecommunications Industry

The modern telecommunications industry aptly illustrates the fluctuations characterizing dynamic markets. Wireless mobile phone service—the capacity, speed, quality, and efficiency achieved by telecommunications networks in transmission through the operation of mobile devices—all have changed dramatically in a relatively short time span, reaching performance measures unimaginable just a few years ago. In turn, these advances dramatically expanded the technological capabilities of the cellular phone devices and uses by which the industry functions, correspondingly multiplying the capacity, variety, and quality of the content that wireless carriers transmit. By virtue

of these developments mobile services have grown exponentially in the number and composition of subscribers as well as in the range of product and service plan choices and pricing available to consumers. This phenomenon has generated even more complexity and dynamism in the ways business is done in the wireless services industry, and in how firms there compete.

For businesses to succeed under constantly fluctuating market conditions entailing such extraordinary complexity and dynamic forces, as ordinary common sense would confirm, would call for commensurate market strategies and ongoing investment of sufficient resources. In particular, it would demand ready access to large capital, exceptional technological innovation, and aggressive marketing. Also crucial to that end are commercial acumen, speed, and agility in responding and adapting to the fast-paced and steadily shifting ground underpinning the industry. Starkly stated, in these contests, the race is indeed to the swift. Firms able to move speedily and nimbly enough in such challenging market conditions those that commit the level of investment called for to create new business channels, upgrade plants, improve product quality and access to operating systems; that adjust pricing plans flexibly to reflect expressed consumer preferences and emerging market trends; and that grasp competitive opportunities manifest in the industry's dynamics—are more likely to survive. Those that cannot or refrain from doing so are prone to lag behind more and more, or even fail.

e. Market-Specific Behavior in Complex and Dynamic Industries

Most significant about the preceding contrast between relatively simple versus complex product markets, and the static as opposed to the dynamic, is how the distinction bears upon individual and corporate behavior in a business context. The differences raise a basic question: whether or not commercial practices and decision-making norms generally prevailing in one type of market may be transferable, and thereby likely to inform and guide the kinds of practices and decisions that govern another type, thus aiding predictions about the business choices company executives are likely to make under particular market conditions.

From this court's review, the record of this litigation informs a response to the preceding question. Projections of likely conduct in one type of market and analysis and predictions of competitive effects should take account of the unique features of the particular market and not be gauged by economic standards and practices that characterize another. Effects on competition in the market for cinder blocks, for instance, should not be assessed by the rules and practices prevalent in the market for computers. On this view, the extreme complexity and dynamism characterizing the wireless telecommunications markets would justify treating the industry as unusual for the purposes of antitrust analysis, and hence not be examined solely according to traditional economic models or based narrowly on the simpler business calculus that may be more fitting in evaluating competitive effects in relatively simpler and stable product markets.

In this court's view, in the intensely competitive and rapidly changing environment in which complex and dynamic markets operate, the anticompetitive business strategies and market effects Plaintiff States predict are unlikely. It is not likely, perhaps improbable or even not rational, that a major new or reinforced market participant, rather than vying aggressively to entice additional customers from competitors by introducing innovations, and investing more to protect and expand market share, would do the exact opposite, thereby risking harm to its customer base, weakening commercial reputation, and jeopardizing longer-term revenues. To borrow a sports metaphor, a boxer who has strived and sweated for years to reach the title prize fight is not likely to pull punches and take a dive the moment he steps into the ring against the reigning champ.

By the same token, it would defy reasonable expectation of likely future conduct by reasonable corporate executives of companies in complex and dynamic markets for a business that has staked out a role and gained consumer recognition as an aggressive competitor, as T-Mobile has done, suddenly to embrace a passive outlook. In other words, as this court reads market dynamics, it is unlikely that such a firm would sit back and follow the pack, forego innovations that would enable it to remain lockstep with advances in the industry, or to pursue stale or outdated measures as competitive policies, unmindful of the damage to its business reputation and customer loyalty, and hence foregoing opportunities to lead and surpass rivals.

f. New T-Mobile's Likely Post-Merger Behavior

To drive these points home from the abstract to the merger dispute now before the court, this discussion relates in two fundamental ways to the arguments the parties have advanced, and so informs the predictive function the court must perform. Plaintiff States contend that the T-Mobile/Sprint merger is likely anticompetitive because it will lead to higher prices in the RMWTS Market, even in the short term. That prospect will likely come to pass, they argue, because New T-Mobile will engage in business strategies that would create coordinated or unilateral effects,

such as by failing to lower prices when the opportune occasion to do so arises, and pulling punches by not engaging aggressively enough in competing with Verizon and AT&T. In Plaintiff States' analysis, New T-Mobile would thus enable its head-to-head competitors to increase wireless service prices or lower service quality and then simply follow their lead.

The court is not persuaded that post-merger New T-Mobile is likely to adopt such a course. First, it is essential to consider a basic flaw in the antitrust theory and economic analysis Plaintiff States advance. Anticompetitive results such as higher prices and lower quality produced by coordinated or unilateral effects of a merger do not just "happen"; they are not self-executing outcomes spontaneously set in motion upon the creation of a presumed level of market concentration of fewer competitors, or the large market shares amassed by particular participants. Rather, if such consequences do occur after a merger, they necessarily embody the actions taken, directly or indirectly, by decisionmakers in the relevant market. In other words, behind the assumptions and figures and models produced by the economic analysis and engineering models and business experts forecasting post-merger price increases or declining product quality induced by New T-Mobile's competitive conduct deriving from its greater market share, there would have to be purposeful business choices made by the corporation's management calculated, affirmatively or by effect, to achieve those ends. But, in this court's view, whatever anticompetitive course traditional antitrust economic theory and analysis would foretell may come to pass by a merger in a simple, static market, in a complex and dynamic industry such as the RMWTS Market, it is highly unlikely that New T-Mobile executives, upon the company being reinforced as a competitor nearer in size and resources to AT&T and Verizon, would do a commercial about-face, and instead pursue anticompetitive strategies.

In the court's view, the contrary New T-Mobile strategy Plaintiff States envision would not be rational in the near or long term. It would be at odds with predictions of what objectively reasonable individual and corporate behavior would embrace in a complex and dynamic market under the factual circumstances presented here. [A]gainst a backdrop of T-Mobile's longstanding business strategy as the self-styled maverick and disruptive Un-carrier, it would be counter-productive, even self-defeating, for New T-Mobile soon after the merger to fail to invest, innovate, and improve network speed, capacity, and quality, or to refrain from offering products incorporating the most advanced technologies, enhanced content, and improved service plans, and ultimately to lower prices, as market dynamism would demand and more reliably predict. By embarking on the polar course Plaintiff States foresee, New T-Mobile would effectively imperil its own future.

The court cannot accept the premise that under the competitive circumstances presented here, responsible business executives of major publicly-traded corporations will likely act irrationally in directing the affairs of the company they manage. To the contrary, the court assumes that in responding to major business challenges and opportunities, and making momentous decisions at a critical juncture determining the business's future, corporate managers are more apt to behave responsibly, in accord with applicable legal and business norms and fiduciary duties.

g. The Posture of Sprint

Given the extensive commercial demands imposed on businesses in complex and dynamic industries—for constant investment, innovation, marketing, and technology—the court is not persuaded, for the reasons articulated above, that Sprint possesses the financial and operational means to survive in the near term as a national wireless carrier. This prognosis is especially likely in the context of the vast resources that will be needed to fulfill the telecommunications industry's and the nation's growing demand for 5G service, taking sufficiently into account the transformative changes that development implicates for the wireless market. In trial testimony that the court found credible, Sprint management itself acknowledged that bleak prospect.

h. Impact of the Telecommunications Industry

There is another overarching dimension which bears contextually on the likelihood that New T-Mobile executives will engage in the post-merger anticompetitive conduct causing the coordinated and unilateral effects that Plaintiff States predict. That consideration embodies the integral role that the telecommunications industry and RMWTS Market play in the lives of the entire population of the country as sources of a vital prop for modern living and well-being. To this extent, the wireless market also serves as an essential component of the national economy.

Undeniably, mobile phones and other electronic devices whose operation depends on wireless service networks are ubiquitous in our society—indeed, all over the globe. Hundreds of millions of Americans, well over the majority of the total population residing in every state and territory in the Union, own mobile devices and are beholden to wireless services for their operation. The strong reliance of such a vast number of users on cell phones and other wireless devices to engage in various forms of communication permeates every corner of American social, economic,

and public life. And that dependence encompasses all types of individuals, businesses, government, and institutions. The reach of the RMWTS markets extends equally broadly to every essential purpose—work, education, recreation, business, health, and social functions.

These considerations carry profound implications for the issues before the court. In particular, they underscore the large magnitude of the interest that an overwhelming segment of the American population and economy have in ensuring the availability of a nationwide wireless service system possessing the largest capacity, maximum speed, best quality, and highest efficiency at the lowest possible marginal cost and product price.

The expansive breadth and depth of the interests of consumers and the national economy alike in optimal operation of the RMWTS Market are manifest in several ways. Rapid increases in the market's base of customers in turn enlarge consumer demands for more and better wireless service, thus necessarily further expanding the complexity and dynamism, as well as the product interconnection and consumer dependence that already characterize the wireless telecommunications industry. By the same token, higher product demand places greater business and individual pressures on market participants to invest and innovate so as to compete actively, operate efficiently, and protect and enlarge market shares, at the risk of being left behind by the quick pace of market developments. The industry's profound impact and importance also serve as a big spotlight to focus more intense attention of public regulators and other law enforcement officials to be more vigilant and aggressive in promoting the public interest and protecting consumers and the national economy from harm. That oversight helps ensure lawful business conduct and enforcement of compliance with remedial commitments the government imposes to enhance competition, as witnessed in this case by the intervention of both federal and various state agencies.

As applied to the disputed issues raised in this action, the court considers the far-reaching impact and importance of the wireless services market to such a large portion of the population and to the national economy as raising a constraint on anticompetitive behavior and as a powerful incentive for vigorous competition. This observation lends support to two predictions central to this proceeding. First, given the size and national significance of the wireless services market, and the heightened public interest and governmental scrutiny it engenders, New T-Mobile is not likely, especially in the near term, to pursue raising prices or lowering quality of wireless service by means of either coordinated or unilateral effects. Hence, Plaintiff States' concerns and projections of such outcomes of the Proposed Merger are not well-founded. Second, the expanse and importance of the wireless industry that generate ever greater competitive pressures and demands of consumers and other industrial forces also give persuasive weight to evidence forecasting that Sprint is not likely to survive as a major competitive carrier of national scope and market impact.

CONCLUSION

Having been tasked with predicting the future state of the national and local RMWTS Markets both with and without the merger, and relying on both the evidence at trial and the various judicial tools available, the court concludes that the Proposed Merger is not reasonably likely to substantially lessen competition in the RMWTS Markets. Despite the strength of Plaintiff States' prima facie case, which might well suffice to warrant injunction of mergers in more traditional industries, a variety of considerations raised at trial have persuaded the court that a presumption of anticompetitive effects would be misleading in this particularly dynamic and rapidly changing industry. T-Mobile has redefined itself over the past decade as a maverick that has spurred the two largest players in its industry to make numerous pro-consumer changes. The Proposed Merger would allow the merged company to continue T-Mobile's undeniably successful business strategy for the foreseeable future.

While Sprint has made valiant attempts to stay competitive in a rapidly developing and capital-intensive market, the overwhelming view both within Sprint and in the wider industry is that Sprint is falling farther and farther short of the targets it must hit to remain relevant as a significant competitor.

Finally, the FCC and DOJ have closely scrutinized this transaction and expended considerable energy and resources to arrange the entry of DISH as a fourth nationwide competitor, based on its successful history in other consumer industries and its vast holdings of spectrum, the most critical resource needed to compete in the RMWTS Markets. DISH's statements at trial persuade the court that the new firm will take advantage of its opportunity, aggressively competing in the RMWTS Markets to the benefit of price-conscious consumers and opening for consumer use a broad range of spectrum that had heretofore remained fallow.

The court remains fully mindful that among its various likely prospects, one possibility a merger of this magnitude raises is that of a less competitive future in the RMWTS Markets. However remote, that concern must be taken seriously. The court, however, does not believe that such a possibility is reasonably likely in light of the numerous considerations discussed above. Accordingly, the court concludes that Plaintiff States have failed to prove

a violation of Section 7 and thus declines to enjoin the acquisition of Sprint by T-Mobile.

Notes and Questions

1. DOJ agreement. Two months after the opinion above was issued, a district court in Washington D.C. agreed to the proposed final judgment that the DOJ and several states proposed with the agreement of T-Mobile and Sprint. *United States v. Deutsche Telekom AG*, No. 19-2232, 2020 WL 1873555 (D.D.C. Apr. 14, 2020). Because the United States approved the merger with conditions, the court reviewed the DOJ's recommendation under a statute called the Tunney Act, 15 U.S.C. § 16(b)–(h). That act has been interpreted to accord deference to the DOJ's recommendations in antitrust consent decrees, and the district court emphasized such deference in approving the merger. And in approving the DOJ consent decree, the court stated that the case excerpted above “has little, if any, relevance to this action. Unlike in that case, the court is not ‘tasked with deciding whether the merger as a whole runs afoul of the antitrust laws.’ Indeed, the legal inquiry here is narrower and the United States’ views are entitled to substantial deference.” *Id.* at *3 n.1 (quoting *United States v. US Airways Group, Inc.*, 38 F. Supp. 3d 69, 75 (D.D.C. 2014)).

2. DOJ and FCC influence? The case excerpted above indicates that the DOJ's and FCC's actions were relevant to its consideration of the states' complaint. It makes sense for a court to take account of remedies that the merging parties agreed to with the FCC and the DOJ, but the court also accords some deference to the FCC's and DOJ's legal conclusions, emphasizing not only their conditions but also their familiarity with the telecommunications industry. Is that an abdication of the court's responsibility, on the theory that judges should reach their own judgments? Or would ignoring the FCC and DOJ conclusions amount to a rejection of the reason to have administrative agencies in the first place, on the theory that judges should defer to agencies that are designed to amass expertise that judges lack?

3. DOJ and FCC counterfactual. If the FCC and/or DOJ had opposed the merger, do you think the court would have decided the case excerpted above differently? That is, how much deference was the court according to those agencies?

4. What Is Special About Telecommunications? The court places great emphasis on the ways in which the wireless telecommunications industry is different from other industries. This discussion implicates many themes that arise throughout the casebook. To what extent is telecommunications special? Which aspects of telecommunications do you think are distinctions that make a difference?

5. Pro and Con. What is the best argument in favor of this merger? The best argument against? Were those arguments presented in the case excerpted above? Was the court's discussion of them (to the extent they were made) persuasive? What else should the parties have said? What else should the court have said?

CHAPTER 13

Universal Service: From Telephony to Broadband

Insert on page 700 after note 8:

9. Rural Digital Opportunity Fund. Saying that “[b]ringing digital opportunity to Americans living on the wrong side of the digital divide continues to be the Federal Communication Commission’s top priority,” the FCC in 2020 announced a more-than \$20 billion Rural Digital Opportunity Fund, replacing the Connect America Fund, to increase minimum speeds in rural areas to 25/3 Mbps. Rural Digital Opportunity Fund, Connect America Fund, Report and Order, 35 FCC Rcd. 686, 687 ¶ 1 (2020). Expanding on the auctions held for the CAF, the FCC decided it would conduct auctions in which carriers would bid for subsidies through a combination of specifying greater levels of service at lower costs.

CHAPTER 14

Regulating Broadband Networks

Insert on page 844:

MOZILLA CORP. v. FCC

940 F.3d 1 (D.C. Cir. 2019)

Opinion for the court per curiam. Concurring opinions filed by Circuit Judge MILLETT and WILKINS. Opinion concurring in part and dissenting in part filed by Senior Circuit Judge WILLIAMS.

PER CURIAM:

In 2018, the Federal Communications Commission adopted an order classifying broadband Internet access service as an information service under Title I of the Communications Act of 1934, as amended by the Telecommunications Act of 1996. *See* Restoring Internet Freedom, Declaratory Ruling, Report and Order, and Order, 33 FCC Rcd. 311 (2018) (2018 Order). In so doing, the agency pursued a market-based, “light-touch” policy for governing the Internet and departed from its 2015 order that had imposed utility-style regulation under Title II of the Act.

The 2018 Order accomplishes a number of objectives. First, and most importantly, it classifies broadband Internet as an “information service,” and mobile broadband as a “private mobile service.” Second, relying on Section 257 of the Act (located in Title II but written so as to apply to Titles I through VI), the Commission adopts transparency rules intended to ensure that consumers have adequate data about Internet Service Providers’ network practices. Third, the Commission undertakes a cost-benefit analysis, concluding that the benefits of a market-based, “light-touch” regime for Internet governance outweigh those of common carrier regulation under Title II, resting heavily on the combination of the transparency requirements imposed by the Commission under Section 257 with enforcement of existing antitrust and consumer protection laws. The Commission likewise finds that the burdens of the Title II Order’s conduct rules exceed their benefits.

We uphold the 2018 Order, with two exceptions. First, the Court concludes that the Commission has not shown legal authority to issue its Preemption Directive, which would have barred states from imposing any rule or requirement that the Commission “repealed or decided to refrain from imposing” in the Order or that is “more stringent” than the Order. The Court accordingly vacates that portion of the Order. Second, we remand the Order to the agency on three discrete issues: (1) The Order failed to examine the implications of its decisions for public safety; (2) the Order does not sufficiently explain what reclassification will mean for regulation of pole attachments; and (3) the agency did not adequately address Petitioners’ concerns about the effects of broadband reclassification on the Lifeline Program.

I. Broadband Internet Classification

The central issue before us is whether the Commission lawfully applied the statute in classifying broadband Internet access service as an “information service.” We approach the issue through the lens of the Supreme Court’s decision in *Brand X*, which upheld the Commission’s 2002 refusal to classify cable broadband as a “telecommunications service.” *Nat’l Cable & Telecomm. Ass’n v. Brand X Internet Servs.*, 545 U.S. 967, 974 (2005). The Commission’s classification of cable modem as an “information service” was not challenged in *Brand X*, but, given that “telecommunications service” and “information service” have been treated as mutually exclusive by the Commission since the late 1990s, a premise Petitioners do not challenge, we view *Brand X* as binding precedent in this case.

We start, of course, with the statutory definition. Section 47 U.S.C. § 153(24) reads:

The term “information service” means the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications . . . but does not include any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service.

The final clause is known as the “telecommunications management” exception. The Act defines “telecommunications service” as follows:

The term “telecommunications service” means the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used.

Id. § 153(53).

The Commission appears to make two arguments for its classification. It states first that “broadband Internet access service necessarily has the capacity or potential ability to be used to engage in the activities within the information service definition—‘generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications,’” 2018 Order ¶ 30 (quoting 47 U.S.C. § 153(24)), and on that basis alone merits an “information service” classification. The Commission then goes on to say: “But even if ‘capability’ were understood as requiring more of the information processing to be performed by the classified service itself, we find that broadband Internet access service meets that standard.” 2018 Order ¶ 33.

[W]e hold that classifying broadband Internet access as an “information service” based on the functionalities of DNS and caching is “‘a reasonable policy choice for the [Commission] to make’ at *Chevron*’s second step.” *Brand X*, 545 U.S. at 997 (alteration in original) (quoting *Chevron U.S.A. Inc. v. Natural Res. Def. Cncl.*, 467 U.S. 837, 845 (1984)).

A. The Supreme Court’s Decision in *Brand X*

Brand X held that, by virtue of the ambiguity of the word “offering,” the FCC could permissibly choose not to classify cable modem service as a “telecommunications service.” *Brand X*, 545 U.S. at 973–74, 989–92. As to DNS and caching, the *Brand X* Court endorsed the Commission’s argument that those functionalities can be relied on to classify cable modem service as an “information service.” Challengers opposing the FCC had argued that when consumers “go[] beyond” certain Internet services offered by cable modem companies themselves—for example, beyond access to proprietary email and Web pages (commonly referred to as the cable modem companies’ “walled gardens”)—the companies were “offering” a “telecommunications service” rather than an “information service.” *Id.* at 998. The Court rejected this claim. It found that such a view “conflicts with the Commission’s understanding of the nature of cable modem service,” which the Court deemed “reasonable.” *Id.*; cf. 2018 Order ¶ 51. The Court explained that—when a user accesses purely third-party content online—“he is *equally using* the information service provided by the cable company that offers him Internet access as when he accesses the company’s own Web site, its email service, or his personal Web page,” *Brand X*, 545 U.S. at 999 (emphasis added), i.e., “walled garden” services. Why so?

Brand X’s answer, as relevant here, lay in DNS and caching. The argument proceeded in two steps—first, showing that DNS and caching themselves can properly fall under the “information service” rubric; second, showing that these “information services” are sufficiently integrated with the transmission element of broadband that it is reasonable to classify cable modem service as an “information service.” See *Brand X*, 545 U.S. at 999–1000.

B. DNS and Caching in the 2018 Order

The reasoning in the 2018 Order tallies with the line of argument in *Brand X* described above. The Commission’s principal claim is that “ISPs offer end users the capability to interact with information online . . . through a variety of functionally integrated information processing components that are part and parcel of the broadband Internet access service offering itself”—including DNS and caching. 2018 Order ¶ 33. The Commission describes DNS and caching as “integrated information processing capabilities offered as part of broadband Internet access service to consumers today.” *Id.* We hold that under *Brand X* this conclusion is reasonable.

C. Objections to the Classification

Petitioners raise numerous objections aimed to show that the Commission’s reliance on DNS and caching for classifying broadband as an “information service” is unreasonable at *Chevron*’s second step. We find them unconvincing.

1. “Walled Garden” Reading of *Brand X*

First, to short-circuit the Commission’s reliance on *Brand X*, Petitioners try to characterize the Court’s reasoning in that case as dependent on a vision of Internet providers as offering mainly access to their “walled

gardens.” They assert that in *Brand X* “the Court was focused on the [Broadband Internet Access Service (BIAS)] providers’ add-on information services, such as ISP-provided email,” and that “the Court had no occasion to consider the proper classification of a service combining telecommunications with nothing more than DNS and caching.” Mozilla Br. 42. This reading is unpersuasive because it airbrushes out the lengthy discussion summarized above in which the Court finds “reasonable” the Commission’s “information-service” classification even where “a consumer goes beyond [walled garden] offerings and accesses content provided by parties other than the cable company,” *Brand X*, 545 U.S. at 998—by virtue of the functionalities of DNS and caching. We thus reject Petitioners’ attempt to discredit the Commission’s sensible reliance on *Brand X*’s treatment of DNS and caching.

2. “Telecommunications Management” Exception

Petitioners assert that DNS and caching fall under the “telecommunications management” exception (TME) and so cannot be relied on to justify an “information service” classification. We find that Petitioners’ arguments do not hold up, either because they rest on a misreading of *Brand X* and *United States Telecom Ass’n v. FCC*, 825 F.3d 674 (D.C. Cir. 2016) (*USTA*) or do not adequately grapple with the Commission’s reasonable explanation as to why DNS and caching fall outside that exception. Our discussion here will be quite involved in part because *Brand X* did not directly confront whether DNS and caching may fall within the TME.

a. The Commission’s Interpretation

To begin with, Petitioners misconstrue *USTA*. As they do persistently, they gloss passages that find parts of the Title II Order to be *permissible* readings of the statute as *mandating* those readings—when the passages plainly do not do so. A case in point is the treatment of the TME. Petitioners say that “[t]his Court has *already agreed* that DNS and caching fall within the terms of the telecommunications management exception.” Mozilla Br. 43 (emphasis added) (citing *USTA*, 825 F.3d at 705). Yet all we said in *USTA* was that we were “unpersuaded” that the FCC’s “use of the telecommunications management exception was . . . unreasonable.” *USTA*, 825 F.3d at 705. The Title II Order, in other words, adopted a permissible reading, though not a required one. This holding in no way bars the Commission from adopting a contrary view now—so long as it adequately justifies that view, as we find it has.

If a service is “directed at . . . customers or end users,” 2018 Order ¶ 36 (quoting *United States v. Western Elec. Co.*, No. 82-0192, 1989 WL 119060, at *1 (D.D.C. Sept. 11, 1989)), or benefits users “in significant part,” *id.* ¶ 38, or “predominantly,” *id.* ¶ 42, it does not call for TME classification. We view this construction as an adequately justified departure from the Title II Order’s understanding of the TME in the face of a dauntingly ambiguous provision with inevitably fuzzy borderline cases and complex and possibly inconsistent (or at least orthogonal) policy implications.

Given the Commission’s approach, it need not—and does not—deny that even those services properly classed under the TME benefit end users *in some respect*. As one commenter notes, “To maintain . . . that something that is ‘useful’ to an end user cannot fall under the management exception is absurd, as the entire purpose of broadband is to be useful to end users” Public Knowledge Reply at 37.

But a rule involving a spectrum or continuum commonly requires a decider to select a point where both ends are in play. Night and day are distinguishable, however difficult classification may be at dawn and dusk. The Commission’s way of construing the TME and applying its continuum-based approach is not inconsistent with Public Knowledge’s point that “the entire purpose of broadband is to be useful to end users.” The Commission notes that its “focus remains on the purpose or use of the specific function in question and not merely whether the resulting service, as a whole, is useful to end-users.” 2018 Order ¶ 38 n.135. While DNS might play a role in managing a network, the Commission reasonably concluded that DNS “is a function that is useful and essential to providing Internet access for the ordinary consumer,” *id.* ¶ 36, and that these benefits to the end user predominate over any management function DNS might serve. The Commission says that caching “benefits” users through “rapid retrieval of information from a local cache,” *id.* ¶ 42, and can also be used “as part of a service, such as DNS, which is *predominantly* to the benefit of the user (DNS caching),” *id.* (emphasis added). “Although confronted with claims that DNS is, *in significant part*, designed to be useful to end-users rather than providers, the Title II Order nonetheless decided that it fell within the [TME].” *Id.* ¶ 38 (emphasis added). The Commission reasonably declined to follow this route (partly, as we shall see below, because it believed that it would cause the exception to swallow the rule in ways antithetical to its reading of Commission precedent and the Act’s goals). It chose a different, and reasonable, alternative.

b. Modification of Final Judgment Precedent

In adopting its approach to the TME, the Commission rested on precedent from a line of judicial decisions interpreting the Modification of Final Judgment (MFJ), a consent decree entered into between the Department of Justice and AT&T in 1982 as part of the breakup of the AT&T monopoly to create a set of independent regional Bell Operating Companies (BOCs).

The Commission makes a good case for the persuasiveness of this precedent. First, the definition of “information service” in the 1996 Act—including the TME—is lifted nearly verbatim from the 1982 consent decree. Second, in the case on which the Commission principally relies, the court was interpreting the MFJ’s TME equivalent and adopted a reading in keeping with its understanding of Department of Justice policy at the time.

In *Western Electric*, Judge Greene addressed the question whether the consent decree permitted the BOCs to offer relay services for customers who use “telecommunications devices for the deaf” (TDDs). 1989 WL 119060 at *1. The court held that, because TDD services involve “transformation of information”—“the very crux and purpose of the TDD relay services”—they “f[e]ll squarely” within the definition of “information services,” which covers the capability to “transform[] . . . information.” *Id.* [T]he court explained, relying on the Department of Justice *Competitive Impact Statement*, that the TME “was directed at internal operations, not at services for customers or end users.” *Id.* (emphasis added) (citing Department of Justice, *Competitive Impact Statement in Connection with Proposed Modification of Final Judgment*, Notice, 47 Fed. Reg. 7170, 7176 (Feb. 17, 1982)).

[T]he Commission rightly acknowledges that being “directed at” one end of a spectrum does not rule out embodying certain aspects from the other end. The agency was within its rights to treat [the *Western Electric*] analysis—which in essence interpreted the statutory provision at issue and squared with the government’s position supporting enforcement of the antitrust decree—as support for its construction of the TME.

The Commission offers an added reason to put stock in the MFJ precedent: It believed that Petitioners’ approach risked causing the TME exception to swallow the “information services” category. It said, plausibly, that such an “expansive view” of the TME assigns it an outsized role, thereby “narrowing . . . the scope of information services” in a way that clashes with the Commission’s pre-1996 Act approach to cabinining the “basic services” category, *see* 2018 Order ¶ 38 & n.135, and the 1996 Act’s imperative to “preserve the vibrant and competitive free market . . . for the Internet . . . unfettered by Federal or State regulation,” *id.* ¶ 39 (quoting 47 U.S.C. § 230(b)(2)), which the Commission permissibly uses as a rationale to interpret a vague provision in a way that limits regulatory burdens. In sum, the Commission lawfully construed an ambiguous statutory phrase in a way that tallies with its policy judgment, as is its prerogative.

The Commission extends the same logic to caching, though matters here are less obvious. It explains that caching “does not merely ‘manage’ an ISP’s broadband Internet access service and underlying network,” but “enables and enhances consumers’ access to and use of information online.” 2018 Order ¶ 42. Granted, some ISPs describe caching in terms indicating that it is a network management practice, and caching can help reduce ISPs’ costs. But these facts are not determinative. The Commission is entitled to draw its own conclusions based on its (permissible) interpretation of the TME, so long as consistent with the record. Here it has done that.

3. Adjunct-to-Basic Precedent

Finally, Petitioners raise a host of objections arising from the Commission’s “adjunct-to-basic” precedent, developed in the *Computer Inquiries* orders issued by the Commission. *See* Amendment of Section 64.702 of the Commission’s Rules and Regulations, 77 F.C.C.2d 384 (1980) (Second Computer Inquiry). Because in our view the precedents in this area are murky, raising convoluted questions of grafting older Commission interpretations onto the “information services” definition as applied to broadband Internet service, we find neither side’s recounting of adjunct-to-basic precedent fully compelling. Even though Congress’s creation of the TME may fairly be said to have “[t]rack[ed]” adjunct-to-basic in certain respects, *USTA*, 825 F.3d at 691, the Commission reasonably refused to be bound by facets of the analogy filtered through the lens of the Title II Order.

We are satisfied with the Commission’s prioritization of the MFJ precedent and its way of squaring the adjunct-to-basic precedent with its treatment of DNS and caching. [D]evising a coherent and workable test for applying the statutory TME permissibly takes precedence in the Commission’s analysis over attempts to reach synthetic conformity between adjunct-to-basic precedent and the 1996 Act’s terms. As the Court said in *Brand X*, we should “leav[e] federal telecommunications policy in this technical and complex area to be set by the Commission, not by warring analogies,” 545 U.S. at 992, whether crafted by courts, litigants, or Commissions past.

4. Functional Integration

Petitioners then open a new—and final—line of attack: *Even if* DNS and caching are “information services,” the Commission’s reliance on them to classify broadband as an “information service” was still unreasonable. As a threshold matter, we note that *Brand X* already held it reasonable for the Commission to conclude that DNS and caching are information services functionally integrated with the offering of “Internet access [service]” “to members of the public.” *Brand X*, 545 U.S. at 1000.

Petitioners first play up the facts that users may obtain DNS from providers other than their ISPs and that caching is not utterly indispensable. We find the objection misguided. As the Commission explained, “[T]he fact that some consumers obtain [DNS and caching] from third-party alternatives is not a basis for ignoring the capabilities that a broadband provider actually ‘offers.’” 2018 Order ¶ 50. The agency reasonably concluded that, notwithstanding the availability of alternative sources of DNS, a market where “the vast majority of ordinary consumers”— “[a]pproximately 97 percent”—“rely upon the DNS functionality provided by their ISP,” 2018 Order ¶ 34 & n.109 (citation omitted in second quotation), as “part and parcel of the broadband Internet access service,” *id.* ¶ 42, meets *Brand X*’s requirements for functional integration. *Chevron* licenses these interpretive steps.

Second, Petitioners focus on what they dub the “relative importance” of the “inextricably intertwined” components at play—DNS/caching and high-speed transmission. *Mozilla Br.* 47. Yet that did not keep the Court from finding reasonable the FCC’s position that DNS and caching were functionally integrated with high-speed transmission.

Finally, Petitioners contend that even if DNS and caching *were* functionally integrated with transmission, that “does not automatically lead to an information service classification.” *Mozilla Br.* 47. But the Supreme Court has never imposed or even hinted at such a quantitative standard to determine whether inextricably intertwined functionalities can justify an “information service” classification. We see no basis for launching such a notion on our own. We conclude, under the guidance of *Brand X*, that the Commission permissibly classified broadband Internet access as an “information service” by virtue of the functionalities afforded by DNS and caching.

II. Mobile Broadband Classification

In keeping with its classification of broadband Internet as an “information service” not subject to Title II, the Commission classified mobile broadband as a “private mobile service”—a classification that under the statute automatically exempted it from common carriage treatment—just as the sole alternative classification available under the statute would have automatically *required* common carriage treatment. *See* 47 U.S.C. § 332(c)(1)–(2). We uphold this classification as reasonable under *Chevron*. As we said in *USTA* (and as the Title II Order and Petitioners recognize), the Commission has compelling policy grounds to ensure consistent treatment of the two varieties of broadband Internet access, fixed and mobile, subjecting both, or neither, to Title II.

A. The 2018 Order’s Provisions

Title III of the Act, as amended by Congress in 1993, Pub. L. No. 103-66, 107 Stat. 312, establishes two mutually exclusive categories of mobile services—“commercial” and “private.” Because the latter is defined negatively, as “any mobile service . . . that is *not* a commercial service or [its] functional equivalent,” 47 U.S.C. § 332(d)(3) (emphases added), the key definition is that of “commercial mobile service.” And the statute defines it as “any mobile service . . . that is provided for profit and makes interconnected service available” to the public. *Id.* § 332(d)(1). “[I]nterconnected service,” in turn, is a “service that is interconnected with the public switched network (as such terms are defined by regulation by the Commission) . . .” *Id.* § 332(d)(2).

Viewing these definitions in the policy-driven mode endorsed by *Brand X*, the Commission observed: “No one disputes that, consistent with the Commission’s previous findings, if mobile broadband Internet access service were a commercial mobile service for purposes of § 332 and were also classified as an information service, such a regulatory framework could lead to contradictory and absurd results.” 2018 Order ¶ 82.

Of course the Commission’s legitimate policy purposes could not justify its indulging in unreasonable interpretations of the controlling provisions. But it is obliged to interpret the statute as a whole, and interpretations needed to avert “statutory contradiction” (really, self-contradiction) ipso facto have a leg up on reasonableness.

B. Objections to the Classification

We now analyze Petitioners’ three specific objections.

1. Meaning of “Public Switched Network”

First, Petitioners protest the Commission’s reversion to the pre-Title II Order definition of “the public switched network.” Their initial argument in support of that claim is an entirely misplaced reliance on passages in *USTA* where we rejected challengers’ argument “that the statutory phrase ‘public switched network’ *must* be understood as if Congress had used the phrase ‘public switched *telephone* network.’” 825 F.3d at 718 (first emphasis added). Rejection of that claim meant, under *Chevron*, that we were required to affirm the Title II Order so long as it had “*permissibly* considered a network using [both] telephone numbers and IP addresses to be a ‘public switched network.’” *Id.* (emphasis added). Thus we said that the phrase “public switched network” “by its plain language *can* reach beyond telephone networks alone.” *Id.* at 717–18 (emphasis added). In light of *Chevron* and *Brand X*, there is no basis for doubting that we meant just what we said, leaving the door open to a different, adequately supported, reading, which the Commission has provided here.

In sum the Commission amply justified its return to the CMRS definition of “public switched network.”

2. Whether Mobile Broadband Is an “Interconnected Service”

Second, Petitioners argue that—even on the Commission’s definition of “public switched network”—it is unreasonable to conclude that mobile broadband is not an “interconnected service.” We disagree.

As noted previously, an “interconnected service,” in the Commission’s view, “gives subscribers the capability to communicate to or receive communication from *all* other users on the public switched network.” 47 C.F.R. § 20.3 (emphasis added). The Commission’s core contention is that Voice-over-IP (VoIP)—the generic name for voice calls transmitted over the Internet—is “a separate application or service” from mobile broadband. 2018 Order ¶ 80. Hence the capabilities it affords cannot turn mobile broadband, a separate service, into an “interconnected service” as defined above. “[M]obile broadband Internet access as a core service is distinct from the service capabilities offered by applications (whether installed by a user or hardware manufacturer) that may ride on top of it.” *Id.* ¶ 81. The Commission instead centers its inquiry on the capabilities mobile broadband service *itself* affords, rather than “whether [it] allows consumers to acquire other services that bridge the gap to the telephone network.” *Id.* ¶ 80 (quoting Verizon Comments at 47, J.A. 1967). As the Commission explained in its 2007 Wireless Broadband Order, its finding that mobile broadband was not an “interconnected service” did not prejudice how other services—such as “interconnected VoIP”—should be classified. Wireless Broadband Order, 22 FCC Rcd. at 5,918 ¶ 46.

In our view the Commission adequately defended its approach and responded to relevant objections, in keeping with its inclusion of the word “all” in the definition of “interconnected service.”

3. Whether Mobile Broadband Is the “Functional Equivalent” of a Commercial Mobile Service

Third, Petitioners dispute the Commission’s conclusion that mobile broadband is not a “functional equivalent” of mobile voice, which all agree is a commercial mobile service. We are unconvinced. In justifying its return to the CMRS test, the Commission properly underscores its statutory “discretion” to define functional equivalence, 2018 Order ¶ 84, whose meaning is to be “specified by regulation by the Commission,” 47 U.S.C. § 332(d)(3); *cf.* Title II Order ¶ 404. The Commission argues that the CMRS test “reflects the best interpretation of section 332,” 2018 Order ¶ 83, and “hews much more faithfully to the intent of Congress” than the Title II Order “or the analyses in the record focusing on the extent of service availability,” *id.* ¶ 84.

It was reasonable for the Commission to home in on substitutability: If the same regulatory regime is to govern two services, the Commission could sensibly conclude that economic rationality suggests that the risk of regulation-engendered economic distortions will be less if the two are close substitutes. As the Commission rightly observed in the Second CMRS Report and Order, the “statute’s overriding purpose [is] to ensure that *similar services* are subject to the same regulatory classification and requirements.” Implementation of Sections 3(n) and 332 of the Communications Act; Regulatory Treatment of Mobile Services, Second Report and Order, 9 FCC Rcd. 1411, 1447 ¶ 78 (emphasis added) (Second CMRS Report and Order). The 2018 Order quite properly rested on this section of the Second CMRS Report and Order.

III. Section 706 Authority

Petitioners additionally argue that the Commission could have addressed the harms of blocking and throttling and issued open Internet rules under Section 706 of the Telecommunications Act. In *Verizon v. FCC*, 740 F.3d 623 (D.C. Cir. 2014) we noted that the language of Section 706 is ambiguous. Thus, we proceed to Step Two of the analysis and ask whether the Commission’s understanding of Section 706 as hortatory represents a reasonable interpretation

of the statute. We find that it does. Indeed, we have previously held that the language of Section 706(a) could “certainly be read as simply setting forth a statement of congressional policy” and “just as easily be read to vest the Commission with actual authority. *Id.* at 637. We have also understood Section 706(b) to be similarly permissive. Furthermore, in support of its interpretation, the Commission notes that Section 706 lacks details “identify[ing] the providers or entities whose conduct could be regulated,” whereas other provisions of the Act that unambiguously grant regulatory authority do specify such details. 2018 Order ¶ 271. We find the Commission’s rationales in favor of its reading of Section 706 to be reasonable.

IV. Section 257 and the 2018 Order’s Transparency Requirements

In its 2018 Order, the Commission retained a “transparency rule,” which provided that “[a]ny person providing broadband Internet access service shall publicly disclose accurate information regarding the network management practices, performance, and commercial terms of its broadband Internet access services sufficient to enable consumers to make informed choices” 2018 Order ¶ 215. Petitioners challenge the Commission’s legal authority to issue a transparency rule under 47 U.S.C. § 257. Instead, Petitioners argue that the Commission should have adopted the rule under Section 706 of the Telecommunications Act. We disagree.

[T]he Commission’s reliance on 47 U.S.C. § 257 to issue the transparency rule was proper. Section 257(a) of the Communications Act required the FCC, within 15 months after enactment of the 1996 Act, to “complete a proceeding for the purpose of identifying and eliminating, by regulations pursuant to its authority under this chapter (other than this section), market entry barriers for entrepreneurs and other small businesses in the provision and ownership of telecommunications services and information services.” 47 U.S.C. § 257(a). Section 257(c) directed the Commission, “triennially thereafter, to report to Congress on such marketplace barriers and how they have been addressed by regulation or could be addressed by recommended statutory changes.” 2018 Order ¶ 232 (citing 47 U.S.C. § 257(c)). The Commission observed that “section 257 does not specify precisely how [they] should obtain and analyze information for purposes of its reports to Congress,” and thus “construe[d] the statutory mandate to ‘identify’ the presence of market barriers as including within it direct authority to collect evidence to prove that such barriers exist.” 2018 Order ¶ 232 n.847. We find that this interpretation of Section 257(a) is permissible. The relevant language in Section 257 is sufficiently ambiguous—Congress does not proscribe the means of “identifying” market barriers. The Commission permissibly read the clause to apply only to the elimination of market barriers. In turn, we find that the Commission’s reading easily satisfies review at *Chevron* Step Two, under which we defer to the agency’s interpretation unless it is “arbitrary or capricious in substance, or manifestly contrary to the statute.” *United States v. Mead Corp.*, 533 U.S. 218, 227 (2001).

V. Arbitrary and Capricious Challenges

The Commission claims that we can uphold its entire rulemaking on the weight of its statutory interpretation alone. In the Commission’s view, the reasonableness of its interpretation necessarily insulates the 2018 Order from arbitrary and capricious challenge. That argument misunderstands the law. To be sure, the analysis of an agency’s statutory interpretation at *Chevron* Step Two has some overlap with arbitrary and capricious review. [But e]ach test must be independently satisfied.

This is a case in point. The Commission has advanced what is, under controlling precedent, a reasonable interpretation of the statute for purposes of *Chevron*. But aspects of the Commission’s decision are still arbitrary and capricious under the Administrative Procedure Act because of the Commission’s failure to address an important and statutorily mandated consideration—the impact of the 2018 Order on public safety—and the Commission’s inadequate consideration of the 2018 Order’s impact on pole-attachment regulation and the Lifeline Program. We consider each of Petitioners’ challenges in turn.

A. Effects on Investment and Innovation

Petitioners challenge the Commission’s conclusion that reclassification of broadband as an information service is “likely to increase ISP investment and output,” 2018 Order ¶ 98, focusing almost entirely on the Commission’s suggestion that the Title II Order may well have led to reduced investment in broadband. They object to particular studies on which the agency relies, the explanations it offers for its conclusions, and its failure to credit certain data. We find that the agency’s position as to the economic benefits of reclassification away from “public-utility style regulation,” *id.* ¶ 90, which the Commission sees as “particularly inapt for a dynamic industry built on technological development and disruption,” *id.* ¶ 100, is supported by substantial evidence, and so reject Petitioners’ objections.

B. Harms to Edge Providers and Consumers

Petitioners emphasize that, historically, the “FCC has repeatedly found that [broadband providers] have the ability and incentive to harm edge providers and consumers.” *See* Mozilla Br. at 62 (citing 2010 Order ¶ 21 and Title II Order ¶ 20). According to Petitioners, the Commission ignored these prior findings when it issued the 2018 Order. Under *FCC v. Fox Television Stations, Inc.*, when an agency changes its policy “a reasoned explanation is needed for disregarding facts and circumstances that underlay or were engendered by the prior policy.” 556 U.S. 502, 515–16 (2009). While “[a]n agency cannot simply disregard contrary or inconvenient factual determinations that it made in the past, any more than it can ignore inconvenient facts when it writes on a blank slate,” *Id.* at 537 (Kennedy, J., concurring), such is not the case here.

The Commission reasonably concluded that the harms the Title II Order was designed to prevent did not require the prior Order’s regulatory measures but could instead be mitigated—at a lower cost—with transparency requirements, consumer protection, and antitrust enforcement measures. Even if the conduct rules lead to marginal deterrence, the Commission determined that the “substantial costs” are “not worth the possible benefits.” 2018 Order ¶ 245; *see also id.* ¶¶ 240–266. In arriving at this conclusion, the Commission “scrutinize[d] closely each prior conduct rule.” 2018 Order ¶ 239. Rather than ignoring its prior findings, the Commission changed its balancing of the relevant incentives. The Commission employed a different method to address its previous concerns regarding broadband providers’ behavior and incentives. In so doing, the Commission provided a “reasoned explanation” for its changed view as required by *Fox*.

1. Reliance on the Transparency Rule

The Commission, in large part, undergirds its light-touch regime with its finding that the transparency rule’s disclosure requirements will discourage broadband providers from engaging in harmful practices. Specifically, the Commission reasoned that public disclosure requirements would encourage broadband providers to abide by open Internet principles and “incentivize[] quick corrective measures by providers if problematic conduct is identified.” *Id.* Disclosure could help ensure that “those affected by such conduct will be in a position to make informed competitive choices or seek available remedies for anticompetitive, unfair, or deceptive practices.” *Id.* ¶ 217. But Petitioners contend that the Commission’s reliance on the transparency rule was unreasonable because “[d]isclosure does little for consumers with no practical alternatives.” Mozilla Br. 55. We disagree and find that the Commission offered a reasonable justification for the transparency rules. Since the Commission first adopted a transparency rule in 2010, “almost no incidents of harm to Internet openness have arisen.” 2018 Order ¶ 242; *see also id.* ¶ 241. Based on this record, the Commission concluded that “public scrutiny and market pressure” is an effective “disinfectant” and leads to “increasingly fast [broadband provider]-driven resolution[s]” when issues do arise. *Id.* ¶ 243. Beyond its claim that the transparency rule does not go far enough to protect some consumers, Petitioners offer no more elaborate reason for explaining how the Commission’s reliance on disclosure was impermissible. Seeing none, we reject Petitioners’ arbitrary-and-capricious challenge.

2. Reliance on Competition

Petitioners contend that the Commission acted arbitrarily and capriciously in changing its view about the magnitude of competitive pressures in the fixed broadband market. Recall, the “premise of Title II and other public utility regulation is that [broadband providers] can exercise market power sufficient to substantially distort economic efficiency and harm end users.” 2018 Order ¶ 123. But in the most recent order, the Commission concluded that “fixed broadband Internet access providers frequently face competitive pressures that mitigate their ability to exert market power.” 2018 Order ¶ 217. Petitioners responded[, but do not] surmount the highly deferential standard of review.

We are satisfied by the Commission’s other reasons for believing that competition exists in the broadband market. The Commission turns to empirical research that supports the claim that the presence of two wireline providers is enough to ensure that meaningful competition exists. Consumers in areas with fewer than two providers may also reap the benefits of competition; a provider in this area “will tend to treat customers that do not have a competitive choice as if they do” because competitive pressures elsewhere “often have spillover effects across a given corporation.” *Id.* ¶ 127. Additionally, these providers could face hefty operational and reputational cost from acting badly in uncompetitive areas. Based on these reasonable findings and our highly deferential standard of review, it was not arbitrary for the Commission to conclude that fixed broadband providers face competitive pressures.

3. Reliance on Antitrust and Consumer Protection Laws

The Commission found that “[i]n the unlikely event that ISPs engage in conduct that harms Internet openness,” legal regimes like “antitrust law and the FTC’s authority under Section 5 of the FTC Act to prohibit unfair and deceptive practice” will provide protection for consumers. *See* 2018 Order ¶ 140. The Commission reasoned that antitrust and consumer protection laws are particularly well-suited to addressing openness concerns because “they apply to the whole of the Internet ecosystem, including edge providers, thereby avoiding tilting the playing field against ISPs and causing economic distortions by regulating only one side of business transactions on the Internet.” *Id.* Petitioners argue that reliance on antitrust and consumer protection law was an improper delegation of authority. We disagree.

To be sure, the Commission’s discussion of antitrust and consumer protection law is no model of agency decisionmaking. The Commission theorized why antitrust and consumer protection law is preferred to *ex ante* regulations but failed to provide any meaningful analysis of whether these laws would, in practice, prevent blocking and throttling. For example, the Commission opines that “[m]ost of the examples of net neutrality violations discussed in the Title II Order could have been investigated as antitrust violations,” *see* 2018 Order ¶ 145, but fails to explain what, if any, concrete remedies might address these antitrust violations. It is concerning that the Commission provides such an anemic analysis of the safety valve that it insists will limit anticompetitive behavior among broadband providers. Nonetheless, we cannot go so far as to say that this failure is so profound that the agency “entirely failed to consider an important aspect of the problem,” *Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983), or otherwise engaged in unreasoned decisionmaking. That is especially true because the Commission viewed those laws as only one part of a larger regulatory and economic framework that it believes will limit broadband providers’ engagement in undesirable practices. The Commission barely survives arbitrary and capricious review on this issue.

C. Public Safety

The Governmental Petitioners challenge as arbitrary and capricious the Commission’s failure to consider the implications for public safety of its changed regulatory posture in the 2018 Order. And they are right.

Congress created the Commission for the purpose of, among other things, “promoting safety of life and property through the use of wire and radio communications.” 47 U.S.C. § 151. So the Commission is “required to consider public safety by . . . its enabling act.” *Nuvio Corp. v. FCC*, 473 F.3d 302, 307 (D.C. Cir. 2006).

An agency’s failure to consider and address during rulemaking “an important aspect of the problem” renders its decision arbitrary and capricious. *State Farm*, 463 U.S. at 43. A “statutorily mandated factor, by definition, is an important aspect of any issue before an administrative agency, as it is for Congress in the first instance to define the appropriate scope of an agency’s mission.” *Public Citizen v. Federal Motor Carrier Safety Admin.*, 374 F.3d 1209, 1216 (D.C. Cir. 2004).

A number of commenters voiced concerns about the threat to public safety that would arise under the proposed (and ultimately adopted) 2018 Order. Specifically, public safety officials explained at some length how allowing broadband providers to prioritize Internet traffic as they see fit, or to demand payment for top-rate speed, could imperil the ability of first responders, providers of critical infrastructure, and members of the public to communicate during a crisis.

In fact, the Commission does not dispute that it was obligated to consider public safety. Nor does it claim that it specifically addressed public safety in its 2018 Order. The Commission’s disregard of its duty to analyze the impact of the 2018 Order on public safety renders its decision arbitrary and capricious in that part and warrants a remand with direction to address the issues raised.

D. Reliance Interests

Petitioners argue[s] that the Commission paid too little heed to the reliance that various parties—particularly edge providers and state and local governments—allegedly placed on the Title II Order in making investments that Petitioners see as jeopardized by the Commission’s action here. The Commission acknowledged, as it must, the significance of reliance interests as a potential weight against its decision, but found the submissions wanting. It argues first that parties have not established any reliance to begin with, for lack of any “attempt to attribute particular portions of th[eir] investment to any reliance on the Title II Order.” 2018 Order ¶ 159. Second, even if reliance had been shown, the Commission maintains that it would not have been reasonable under the circumstances.

[W]e will uphold the agency's treatment of reliance interests based on its alternative argument. That is, assuming the change in agency position implicated serious reliance interests, we agree with the Commission that such reliance would have been unreasonable on the facts before us. Insofar as the regulation on which reliance is asserted is simply the Title II Order's package of rules and policies, we think this is a fair response. [I]n light of the Commission's approach to classifying cable modem service and Internet access since the late 1990s, the Title II Order could reasonably have been viewed as a regulatory step that might soon be reversed.

[Thus, w]e conclude that the agency's treatment of reliance interests is not arbitrary or capricious.

E. Pole Attachments

The Governmental Petitioners express substantial concern that, in reclassifying broadband Internet as an information service, the Commission, without reasoned consideration, took broadband outside the current statutory scheme governing pole attachments. That is because the Communications Act defines the "pole attachment[s]" it subjects to regulation by reference to "telecommunications service[s]" under Title II, not information services under Title I. 47 U.S.C. § 224(a)(4). We agree. The Commission offered, at best, scattered and unreasoned observations in response to comments on this issue. Because the Commission did not adequately address how the reclassification of broadband would affect the regulation of pole attachments, we remand for the Commission to do so.

F. Lifeline Program

The Lifeline Program subsidizes low-income consumers' access to certain communications technologies, including broadband Internet access. *See* 47 U.S.C. §§ 214, 254; 47 C.F.R. § 54.403. The Governmental Petitioners challenged the 2018 Order on the ground that reclassification would eliminate the statutory basis for broadband's inclusion in the Program. The Commission brushed off their concern. That was straightforward legal error. Several commenters raised this concern in response to the NPRM. The Commission backhanded the issue, stating that it "need not address concerns in the record about the effect of . . . reclassification" given its "authority under Section 254(e) of the Act to provide Lifeline support to [Eligible Telecommunications Carriers] that provide broadband service over facilities-based broadband-capable networks that support voice service." 2018 Order ¶ 193.

That response does not work. The Commission completely fails to explain how its "authority under Section 254(e)" could extend to broadband, even "over facilities-based broadband-capable networks that support voice service," 2018 Order ¶ 193, now that broadband is no longer considered to be a common carrier. After all, Section 254(e) provides that "only an eligible *telecommunications carrier* designated under section 214(e) of this title shall be eligible to receive specific Federal universal service support." 47 U.S.C. § 254(e) (emphasis added). And the statute expressly defines an "eligible telecommunications carrier" as a "common carrier" under Title II. *Id.* § 214(e)(1).

G. Cost-Benefit Analysis

Petitioners next take exception to the Commission's cost-benefit analysis. We review cost-benefit analyses with deference, and here find nothing arbitrary in the Commission's choice of methodology or explanation of its conclusions.

First, Petitioners claim that the agency did not account for harms to "innovation and democratic discourse" that the 2018 Order would supposedly bring about. *Mozilla Br.* 73. Second, they assert that the Commission failed to factor in the "cost to consumers of decreased innovation and other consumer harms," citing a comment about Comcast's interference with file sharing, and news stories from 2007–2008 describing how "Comcast had blocked users' ability to share copies of the King James Bible," *Id.* at 73–74.

As an initial matter, Petitioners do not explain how the 2018 Order would harm "innovation and democratic discourse" beyond quoting an assertion by a commentator that "*ex post* enforcement would hamstring nascent industries." *Id.* at 73. [T]he Commission's cost-benefit analysis makes a reasonable case that its "light-touch" approach is more conducive to innovation and openness than the Title II Order. We do note that antitrust enforcement by the Commission's sister agencies (the Department of Justice and the FTC, the latter being released by the 2018 Order from the statutory exclusion effected by application of Title II) aims at generating and protecting competition, *see* Part V.B.3; at least as a general matter, it seems reasonable to expect that competition would tend to multiply the voices in the public square.

In weighing the costs and benefits of Title II regulation against those of a deregulatory strategy, the agency finds that, on almost every point, the latter approach is preferable. Title II regulation would "discourage[] investment in the network," which, in turn, may cause "society . . . to lose some spillover benefits," 2018 Order ¶ 310, including

forgone “improvements in productivity and innovation that occur because broadband is a general-purpose technology,” *id.* Conduct rules mandated by the Title II Order, the Commission said, have “large [negative] effects on consumers obtaining innovative services,” such as zero-rating. *Id.* ¶ 318. Following up its prior observation that “smaller edge providers may benefit from tiered pricing, such as paid prioritization, as a means of gaining entry,” *id.* ¶ 133, it reasoned that removal of the Title II Order’s ban could yield “innovative services and business models,” *id.* ¶ 321. Whatever harms might occur absent a ban on paid prioritization, the agency estimated them to be “small” and “infrequent,” *id.* ¶ 320, and thus outweighed by the costs of the Title II Order. As for rules against blocking and throttling, the agency states that their costs are “likely small,” though they could grow if compliance becomes more onerous. *Id.* ¶ 322. The benefits of such rules, however, are “approximately zero,” *id.* ¶ 323—a point Petitioners do not grapple with. That is so, in the agency’s view, because the 2018 Order’s transparency rules—combined with the deterrent effects of “market forces, public opprobrium, and enforcement of the consumer protection laws”—can “mitigate potential harms.” 2018 Order ¶ 323; *cf.* ¶ 315 (explaining that the Title II Order’s transparency rules would “impose significant additional costs” without “additional benefits”). In sum, a “light-touch” approach can in the Commission’s judgment secure Internet openness and encourage innovation at lower cost than the Title II Order, while yielding unique benefits.

The Commission’s reasoning rehearsed above is not plagued by “serious flaw[s]” that so “undermin[e]” its cost-benefit analysis as to render the rule “unreasonable.” *Nat’l Ass’n of Home Builders v. EPA*, 682 F.3d 1032, 1040 (D.C. Cir. 2012). We therefore reject Petitioners’ objections on this front.

VI. Preemption

We vacate the portion of the 2018 Order that expressly preempts “any state or local requirements that are inconsistent with [its] deregulatory approach.” 2018 Order ¶ 194; *see id.* ¶¶ 194–204 (Preemption Directive). The Commission ignored binding precedent by failing to ground its sweeping Preemption Directive—which goes far beyond conflict preemption—in a lawful source of statutory authority. That failure is fatal.

The relevant portion of the Order provides that “regulation of broadband Internet access service should be governed principally by a uniform set of federal regulations,” and not “by a patchwork that includes separate state and local requirements.” 2018 Order ¶ 194. In service of that goal, the 2018 Order expressly “preempt[s] any state or local measures that would effectively impose rules or requirements that we have repealed or decided to refrain from imposing in this order or that would impose more stringent requirements for any aspect of broadband service that we address in this order.” *Id.* ¶ 195. In other words, the Preemption Directive invalidates all state and local laws that the Commission deems to “interfere with federal regulatory objectives” or that involve “any aspect of broadband service . . . address[ed]” in the Order. *Id.* ¶¶ 195–96.

The Preemption Directive conveys more than a mere intent for the agency to preempt state laws in the future if they conflict with the 2018 Order. The Order was meant to have independent and far-reaching preemptive effect from the moment it issued. And the Commission meant for that preemptive effect to wipe out a broader array of state and local laws than traditional conflict preemption principles would allow.

The Governmental Petitioners challenge the Preemption Directive on the ground that it exceeds the Commission’s statutory authority. They are right.

A. Express and Ancillary Authority

“The [Commission], like other federal agencies, literally has no power to act unless and until Congress confers power upon it.” *American Library Ass’n v. FCC.*, 406 F.3d 689, 698 (D.C. Cir. 2005) (formatting modified). For the Preemption Directive to stand, then, the Commission must have had express or ancillary authority to issue it. It had neither.

The Preemption Directive could not possibly be an exercise of the Commission’s express statutory authority. By reclassifying broadband as an information service, the Commission placed broadband *outside* of its Title II jurisdiction. And broadband is not a “radio transmission” under Title III or a “cable service” under Title VI. So the Commission’s express authority under Titles III or VI does not come into play either. Nor did Congress statutorily grant the Commission freestanding preemption authority to displace state laws even in areas in which it does not otherwise have regulatory power.

Neither can the Commission house the Preemption Directive in its ancillary authority under Title I. “Title I is not an independent source of regulatory authority.” *People of the State of California v. FCC*, 905 F.2d 1217, 1240 n.35 (9th Cir. 1990) (citing *United States v. Southwestern Cable Co.*, 392 U.S. 157, 178 (1968)). As a result, ancillary jurisdiction exists only when “(1) the Commission’s general jurisdictional grant under Title I of the Communications Act covers the regulated subject and (2) the regulations are reasonably ancillary to the Commission’s effective performance of its statutorily mandated responsibilities.” *American Library*, 406 F.3d at 691–92 (formatting modified).

Under binding circuit precedent, those “statutorily mandated responsibilities” must themselves be dictated by Title II, III, or VI of the Act—none of which apply since the Commission took broadband out of Title II. *See Comcast Corp. v. FCC*, 600 F.3d 642, 654 (D.C. Cir. 2010) (“[I]t is Title II, III, or VI to which the authority must ultimately be ancillary.”).

The Commission seemingly agrees because nowhere in the 2018 Order or its briefing does it claim ancillary authority for the Preemption Directive. *See* 2018 Order ¶¶ 194–204; Commission Br. 121 (acknowledging that the Order “makes *no mention* of either Title II or ancillary authority”).

B. The Commission’s Asserted Sources of Authority

With express and ancillary preemption authority off the table, the Commission was explicit that it was grounding its Preemption Directive in (i) the “impossibility exception” to state jurisdiction, and (ii) the “federal policy of nonregulation for information services.” 2018 Order ¶¶ 198, 202. Neither theory holds up.

1. Impossibility Exception

All the impossibility exception does is help police the line between those communications matters falling under the Commission’s authority (Section 152(a)) and those remaining within the States’ wheelhouse (Section 152(b)). Specifically, if the matter involves interstate communications or a mix of state and federal matters *and* it falls within the impossibility exception, then the Commission may regulate to the extent of its statutory authority. If not, the matter falls within the States’ jurisdiction. In other words, the impossibility exception presupposes the existence of statutory authority to regulate; it does not serve as a substitute for that necessary delegation of power from Congress.

2. Federal Policy of Nonregulation

What the Commission calls the “federal policy of nonregulation for information services,” Commission Br. 123, cannot sustain the Preemption Directive either.

First, as a matter of both basic agency law and federalism, the power to preempt the States’ laws must be conferred by Congress. It cannot be a mere byproduct of self-made agency policy. Doubly so here where preemption treads into an area—State regulation of intrastate communications—over which Congress expressly “deni[ed]” the Commission regulatory authority, *Louisiana Public Service Comm’n v. FCC*, 476 U.S. 355, 374 (1986) (*Louisiana PSC*).

Presumably recognizing as much, the Commission attempts to house its preemption authority in 47 U.S.C. § 230(b)(2). That provision says that “the policy of the United States [is] . . . to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, unfettered by Federal or State regulation.” *Id.* No dice. As the Commission has itself acknowledged, “[p]olicy statements are just that—statements of policy. They are not delegations of regulatory authority.” *Comcast*, 600 F.3d at 654. Second, the Commission points to 47 U.S.C. § 153(51), which defines “telecommunications carrier,” and provides that “[a] telecommunications carrier shall be treated as a common carrier under this chapter only to the extent that it is engaged in providing telecommunications services.”

That does not work either. Section 153(51) is a definitional provision in Title I, and so is “not an independent source of regulatory authority.” *People of State of Cal.*, 905 F.2d at 1240 n.35. Quite the opposite. As the parties agree, that provision is a *limitation* on the Commission’s authority.

It also would make no sense for Congress to bury the enormously far-reaching and consequential authority to override every single State’s *statutorily conferred* power to regulate intrastate communications deep within a list of fifty-nine definitions in a non-regulatory portion of the statute, and then articulate the relevant definition as a *restriction* of the Commission’s power.

Third, the Commission points to 47 U.S.C. § 160(e). That provision says that “[a] State commission may not continue to apply or enforce any provision of [the Act] that the Commission has determined to forbear from applying under subsection (a).” Subsection (a), in turn, gives the Commission some flexibility to forbear from regulating technologies classified under Title II.

That Title II provision has no work to do here because the 2018 Order took broadband out of Title II. So the Commission is not “forbear[ing] from applying any provision” of the Act to a Title-II technology. 47 U.S.C. § 160(e). On top of that, Section 160(e)—as a part of Title I—does not itself delegate any preemption authority to the Commission.

3. Case Precedent

Governing precedent nails the coffin shut on the Preemption Directive.

In *Louisiana PSC*, the Supreme Court squarely rejected the Commission’s argument that it “is entitled to pre-empt inconsistent state regulation” just because it “frustrates federal policy.” 476 U.S. at 368. In doing so, the Court was explicit that, if the Commission cannot tether a rule of preemption to a relevant source of statutory authority, courts “simply cannot accept [the] argument that the [Commission] may nevertheless take action which it thinks will best effectuate a federal policy.” *Id.* at 374. That fits this case to a T.

Likewise, in *City of New York v. FCC*, on which the Commission and their amici heavily rely, the Supreme Court repeated that “an agency literally has no power to act, let alone pre-empt the validly enacted legislation of a sovereign State, unless and until Congress confers power upon it.” 486 U.S. 57, 66 (1988). The Court then added that “the best way of determining whether Congress intended the regulations of an administrative agency to displace state law is to examine the nature and scope of the authority granted by Congress to the agency.” *Id.* (quoting *Louisiana PSC*, 476 U.S. at 374 (1989)). Needless to say, no such examination can occur if there is no legislative grant of authority against which to evaluate the preemptive rule, and certainly not when, as here, Congress expressly *withheld* regulatory authority over the matter.

To be sure, in *City of New York*, the Supreme Court referenced the “background of federal pre-emption on this particular issue” as weighing in favor of preemption. 486 U.S. at 66–67. But the Court said so only after the threshold requirement of statutory authority had been satisfied. That statutory authority is the fatal gap in the Commission’s argument here.

Not only is the Commission lacking in its own statutory authority to preempt, but its effort to kick the States out of intrastate broadband regulation also overlooks the Communications Act’s vision of dual federal-state authority and cooperation in this area specifically. Even the 2018 Order itself acknowledges the States’ central role in “policing such matters as fraud, taxation, and general commercial dealings,” 2018 Order ¶ 196, “remedying violations of a wide variety of general state laws,” *id.* ¶ 196 n.732, and “enforcing fair business practices,” *id.* ¶ 196—categories to which broadband regulation is inextricably connected.

C. Conflict Preemption

Finally, the Commission argues that we should leave the Preemption Directive undisturbed because principles of conflict preemption would lead to the same result.

Any intuitive appeal this argument might have offered evaporated at oral argument when the Commission confirmed what the Preemption Directive’s plain language bespeaks: It sweeps “broader than ordinary conflict preemption.” Oral Arg. Tr. 171; see 2018 Order ¶ 195 (preempting “any state or local measures that would effectively impose rules or requirements that we have repealed or decided to refrain from imposing in this order or that would impose more stringent requirements for any aspect of broadband service that we address in this order”). The necessary consequence of this position is that ordinary conflict preemption principles cannot salvage the Preemption Directive.

Beyond that, the Commission’s conflict-preemption argument tries to force a square peg into a round hole. Conflict preemption applies to “state law that *under the circumstances of the particular case* stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress—whether that ‘obstacle’ goes by the name of conflicting; contrary to; repugnance; difference; irreconcilability; inconsistency; violation; curtailment; interference, or the like.” *Geier v. American Honda Motor Co., Inc.*, 529 U.S. 861, 873 (2000) (formatting modified).

Because a conflict-preemption analysis “involves fact-intensive inquiries,” it “mandates deferral of review until an actual preemption of a specific state regulation occurs.” *Alascom, Inc. v. FCC*, 727 F.2d 1212, 1220 (D.C. Cir. 1984). Without the facts of any alleged conflict before us, we cannot begin to make a conflict-preemption assessment in this case, let alone a categorical determination that any and all forms of state regulation of intrastate broadband would inevitably conflict with the 2018 Order.

To be sure, *Chevron* and *Brand X* together confirm that the Commission has interpretive “discretion” to classify broadband as either an information service or a telecommunications service. Congress, in other words, created an interpretive statutory fork in the road and gave the Commission the authority to choose the path.

But the Commission’s power to choose one regulatory destination or another does not carry with it the option to mix and match its favorite parts of both. The dissenting opinion’s defense of the Preemption Directive makes the mistake of collapsing the distinction between (i) the Commission’s authority to make a threshold classification decision, and (ii) the authority to issue affirmative and State-displacing legal commands within the bounds of the classification scheme the Commission has selected (here, Title I). The agency’s power to do the former says nothing about its authority to do the latter. *Chevron*, after all, is not a magic wand that invests agencies with regulatory power beyond what their authorizing statutes provide. Instead, the point of *Chevron* was simply to draw lines between the courts’ and administrative agencies’ respective roles in interpreting ambiguous statutes.

The dissenting opinion’s theory of *Chevron* preemption, in other words, takes the discretion to decide which definition best fits a real-world communications service and attempts to turn that subsidiary judgment into a license to reorder the entire statutory scheme to enforce an overarching “nationwide regime” that enforces the policy preference underlying the definitional choice. Nothing in *Chevron* goes that far. And doing so here would turn every exercise of *Chevron* Step-Two interpretation into a bureaucratic blunderbuss capable of demolishing state laws across the Nation any time the agency fears that state regulation might intrude on its regulatory or deregulatory ethos.

At bottom, the Commission lacked the legal authority to categorically abolish all fifty States’ statutorily conferred authority to regulate intrastate communications. For that reason, we vacate the Preemption Directive. And because no particular state law is at issue in this case and the Commission makes no provision-specific arguments, it would be wholly premature to pass on the preemptive effect, under conflict or other recognized preemption principles, of the remaining portions of the 2018 Order.

VII. Conclusion

Despite the Commission’s failure to adequately consider the 2018 Order’s impact on public safety, pole-attachment regulation, and the Lifeline Program and despite our vacatur of the Preemption Directive, we decline to vacate the 2018 Order in its entirety.

When deciding whether to vacate an order, courts are to consider the “the seriousness of [its] deficiencies (and thus the extent of doubt whether the agency chose correctly) and the disruptive consequences of an interim change that may itself be changed.” *Allied-Signal, Inc. v. United States Nuclear Regulatory Comm’n*, 988 F.2d 146, 150–51 (D.C. Cir. 1993).

Here, those factors weigh in favor of remand without vacatur. First, the Commission may well be able to address on remand the issues it failed to adequately consider in the 2018 Order. Second, the burdens of vacatur on both the regulated parties (or non-regulated parties as it may be) and the Commission counsel in favor of providing the Commission with an opportunity to rectify its errors. Regulation of broadband Internet has been the subject of protracted litigation, with broadband providers subjected to and then released from common carrier regulation over the previous decade. We decline to yet again flick the on-off switch of common-carrier regulation under these circumstances.

But because the Commission’s Preemption Directive lies beyond its authority, we vacate the portion of the 2018 Order purporting to preempt “any state or local requirements that are inconsistent with [the Commission’s] deregulatory approach[.]” *see* 2018 Order ¶ 194.

For the foregoing reasons, the petitions for review are granted in part and denied in part.

MILLETT, Circuit Judge, concurring:

I join the Court’s opinion in full, but not without substantial reservation. The Supreme Court’s decision in *Brand X* compels us to affirm as a reasonable option the agency’s reclassification of broadband as an information service based on its provision of Domain Name System (DNS) and caching. But I am deeply concerned that the result is unhinged from the realities of modern broadband service.

As our opinion today recognizes, auxiliary services like DNS and caching remain in the broadband bundle. But their salience has waned significantly since *Brand X* was decided. DNS is readily available, free of charge, and at a remarkably high quality, from upwards of twenty different third-party providers. And caching has been fundamentally stymied by the explosion of Internet encryption. For these accessories to singlehandedly drive the Commission’s classification decision is to confuse the leash for the dog. In 2005, the Commission’s classification decision was “just barely” permissible. *Brand X*, 545 U.S. at 1003 (Breyer, J., concurring). Almost fifteen years later, hanging the legal status of Internet broadband services on DNS and caching blinks technological reality.

In an area so fraught with political contest and technical complexity, we ordinarily grant the administering agency the widest possible berth in interpreting and administering a technical statutory scheme. But that discretion is not unlimited, and it cannot be invoked to sustain rules fundamentally disconnected from the factual landscape the agency is tasked with regulating. By putting singular and dispositive regulatory weight on broadband’s incidental offering of DNS and caching, the Commission misses the technological forest for a twig.

Yet, as a lower court, we are bound to “the [Supreme Court] case which directly controls,” and so we must follow *Brand X*, as the court’s opinion does. *Agostini v. Felton*, 521 U.S. 203 (1997). It is the Supreme Court’s sole “prerogative” to read *Brand X* in light of the facts of its day, *id.*, and to require the Commission to bring the law into harmony with the realities of the modern broadband marketplace. Until it does—or until Congress steps up to the legislative plate—I am bound to concur in sustaining the Commission’s action.

WILKINS, Circuit Judge, concurring:

I too join the Court’s opinion in full. As Judge Millett’s concurring opinion persuasively explains, we are bound by the Supreme Court’s decision in *Brand X* even though critical aspects of broadband Internet technology and marketing underpinning the Court’s decision have drastically changed since 2005. But revisiting *Brand X* is a task for the Court—in its wisdom—not us.

WILLIAMS, Senior Circuit Judge, concurring in part and dissenting in part:

And be these juggling fiends no more believed,

That palter with us in a double sense;

That keep the word of promise to our ear,

And break it to our hope.

So says Macbeth, finding that the witches’ assurances were sheer artifice and that his life is collapsing around him. The enactors of the 2018 Order, though surely no Macbeths, might nonetheless feel a certain kinship, being told that they acted lawfully in *rejecting* the heavy hand of Title II for the Internet, but that each of the 50 states is free to impose just that. (Many have already enacted such legislation. *See, e.g.*, Cal. S. Comm. on Judiciary, SB 822 Analysis 1 (2018) (explaining that California has expressly “codif[ied] portions of the recently-rescinded . . . rules”). If Internet communications were tidily divided into federal markets and readily severable state markets, this might be no problem. But no modern user of the Internet can believe for a second in such tidy isolation; indeed, the Commission here made an uncontested finding that it would be “impossible” to maintain the regime it had adopted under Title I in the face of inconsistent state regulation. On my colleagues’ view, state policy trumps federal; or, more precisely, the most draconian state policy trumps all else. “The Commission may lawfully decide to free the Internet from Title II,” we say, “It just can’t give its decision any effect in the real world.”

The Commission has invoked the “impossibility exception,” a well-established ground of FCC preemption. As formulated by our circuit, the exception permits the Commission to preempt state regulation “when (1) the matter to be regulated has both interstate and intrastate aspects . . . ; (2) FCC preemption is necessary to protect a valid federal regulatory objective . . . ; and (3) state regulation would ‘negate[] the exercise by the FCC of its own lawful authority’ because regulation of the interstate aspects of the matter cannot be ‘unbundled’ from regulation of the intrastate aspects.” *Public Service Comm’n of Maryland v. FCC*, 909 F.2d 1510, 1515 (D.C. Cir. 1990).

The 2018 Order reasoned that trying to segregate flows of Internet data into discrete intrastate and interstate components for regulatory purposes would be quite hopeless. Although petitioners posed objections to [this] before the agency, they make none here, despite the high bar our cases set for the agency on such issues. Thus the proposition that disallowance of preemption would thoroughly frustrate the application of the Commission's decision is uncontested. Given the uncontested findings, petitioners and the majority rest the case against preemption entirely on the theory that the Commission lacks authority to preempt. Of course authority is essential. Preemption by an agency without authority to preempt would be a contradiction in terms under our constitutional system, where Congress makes the laws. It is also uncontested here that Congress did not afford the FCC *express* authority to preempt.

But Supreme Court decisions make clear that a federal agency's authority to preempt state law *need not be expressly granted*. When a federal agency "promulgates regulations intended to pre-empt state law [i.e., with an express statement of agency intent], the court's inquiry is ... limited," *Fidelity Federal Savings & Loan Ass'n v. de la Cuesta*, 458 U.S. 141, 154 (1982):

If [the agency's] choice represents a reasonable accommodation of conflicting policies that were committed to the agency's care by the statute, we should not disturb it unless it appears from the statute or its legislative history that the accommodation is not one that Congress would have sanctioned.

Id. (quoting *United States v. Shimer*, 367 U.S. 374, 383 (1961)).

Given the Commission's undisputed findings here, the only vulnerability of its position is the possibility suggested in the last clause—whether "it appears from the statute or its legislative history that the accommodation is not one that Congress would have sanctioned." Inquiry into that question proceeds in the usual way of discerning congressional intent.

It is hard to imagine a rational Congress providing for use of Title I, but requiring that any *national* deregulatory policy be implemented only to the degree that it might prove achievable under the internal constraints of Title II.

[T]he question turns on whether we see preemption as serving to protect the federal *regulations* from state frustration or to protect federal choice of a *regulatory regime* from state frustration. The majority staunchly believes that preemption serves solely to protect *affirmative* federal *regulations*. Responding to the Commission's reliance on the preemption that automatically follows forbearance under Title II, it says, "the Commission [has] broad authority over services classified under Title II, unlike those classified under Title I." *Maj. op.* True enough. But the lesson it draws is a complete non sequitur: The broad authority under Title II, says the majority, is "why the Act carves out more space for federal objectives to displace those of the States in the Title II context." *Id.* This explanation assumes an *asymmetry* in preemption implications between (i) heavy-handed regulation and (ii) light-touch regulation. If an agency decides that a robust regulatory scheme is apt in a given sector (say, under Title II), the majority is ready to infer authority to preempt. But, the majority insists, if the agency determines that an industry will flourish best under competitive market norms and accordingly adopts a "light-touch" path, preemption is suddenly superfluous *because* the agency now has less "power to regulate services." A clearer insistence on the unsupported notion that preemption protects *only regulation* itself, *not* a regime of lawful regulatory choices, is hard to imagine.

Viewed as a matter of protecting a lawfully chosen federal regulatory scheme, an inference of preemptive authority is sound to the extent that the state action in question would frustrate an agency's authorized policy choices and actions. Dirigiste state regulation in a sector that an agency thinks works best under market norms would undercut the agency's aims, *no more, no less*, than state rules undermining the agency's affirmative regulations.

The majority's leitmotiv—indeed the entire foundation of its conclusion—is that *only* an agency's possession of affirmative regulatory authority can support authority to preempt state regulation (state regulation nominally applying only to intrastate communications, but because of the impossibility of separation, in practice engulfing interstate communications). But reiteration is not proof—no matter how self-assured. The claim is wrong in its broad form and is inapplicable to the circumstances here.

In the majority's view, when the Commission adopts a deregulatory regime under Title I, there's no there. Of course no one wants the majority to decide a case not before it; but if the handwaving toward conflict preemption is to mean anything, it requires a vision of a Commission exercise of power with which some state regulation could actually conflict. This the majority denies absolutely. Rather, the majority insists that power to preempt depends either on the Commission's "express and expansive authority" "to regulate certain technologies," *Maj. op.*, or on "ancillary authority." The latter in turn requires that the Commission's action be "reasonably ancillary to the Commission's

effective performance of its statutorily mandated responsibilities,” *id.*, which are *exclusively* its responsibilities under Title II, III, at VI of the Act, *see also Comcast*, 600 F.3d at 654. There is no room in this concept for authority to establish a regulatory regime for broadband as an information service—meaning, given the extreme paucity of affirmative regulatory authority under Title I, a highly deregulatory regime. For the majority, the observation that by “reclassifying broadband as an information service, the Commission placed broadband *outside* of its Title II jurisdiction,” *Maj. op.*, is pretty much the end of the game. The majority conspicuously never offers an explanation of how a state regulation could ever conflict with the federal white space to which its reasoning consigns broadband.

My colleagues and I agree that the 1996 Act affords the Commission authority to apply Title II to broadband, or not. Despite the ample and uncontested findings of the Commission that the absence of preemption will gut the [o]rder by leaving all broadband subject to state regulation in which the most intrusive will prevail, and despite Supreme Court authority inferring preemptive power to protect an agency’s regulatory choices, they vacate the preemption directive. Thus, the Commission can choose to apply Title I and not Title II—but if it does, its choice will be meaningless. I respectfully dissent.

Notes and Questions

1. Deference. The court follows Supreme Court precedent that an agency is entitled to change its mind, and that the standard of review does not change simply because the agency has changed its mind. But many petitioners pressed the point that the FCC has changed its mind almost completely, now a number of times, in the span of a relatively small number of years—and that such a situation does not seem to be the exercise of considered, policymaking judgment. Do you think that the court really grapples with this argument? If it shared those concerns, however, what should be its doctrinal or decisional response?

2. Preemption. The court’s decision that the FCC could not preempt all state net neutrality laws substantially limits the effect of the FCC’s action. Do you think that there are any future circumstances in which the FCC would not find there to be conflict preemption? Are there any circumstances in which the court would not uphold such an FCC determination?

3. Section 706. Did the FCC commit a misstep by disavowing its regulatory authority under Section 706? Recall the D.C. Circuit’s *Verizon* decision and ask whether the FCC would have better reached its intended policy results—of no “public utility regulation,” maintaining transparency rules, and effecting preemption of state net neutrality law—if it had agreed with early decisions that Section 706 did in fact give it some new authority.

CHAPTER 15

Internet Platform Regulation

Insert on page 881 after note 4:

5. Services Built on User-Generated Content: In *Marshall's Locksmith Service, Inc. v. Google, LLC*, 925 F.3d 1263 (D.C. Cir. 2019), the plaintiffs sued Google for allegedly promoting scam locksmith services, which plaintiffs also alleged increased Google's advertising revenues (from those who bought ads to counter the presence on Google of scam services). The plaintiffs alleged that Google did two things that fell outside of section 230. First, Google took exact address information from the scam websites and placed pins on Google Maps, which would be shown when someone searched for locksmith services in the relevant area. Second, Google parsed the scam websites and created location information, based on textual descriptions of general service areas or phone numbers or similar, but imprecise, location information. The court held that, because both practices were based on information that the alleged scammers themselves had provided, both were protected by section 230. The court also noted, however, that section 230 would not immunize Google if it "entirely fabricate[d] locksmith addresses." *Id.* at 1272.

Insert on page 885 at end of note 5:

Several parties mounted pre-enforcement constitutional challenges to the statute. The District Court dismissed the claims for lack of standing, but in *Woodhull Freedom Foundation v. United States*, 948 F.3d 363 (D.C. Cir. 2020), the D.C. Circuit found that at least two of the plaintiffs had established standing and remanded their challenges for further proceedings.

Insert on page 885 after note 5:

6. Executive Order on Section 230. In May 2020, President Trump issued an Executive Order on Preventing Online Censorship, <https://www.whitehouse.gov/presidential-actions/executive-order-preventing-online-censorship/>. The Executive Order stated that "online platforms are engaging in selective censorship that is harming our national discourse" as well as "profiting from and promoting the aggression and disinformation spread by foreign governments like China." § 1. Referring to § 230(c) specifically, the order further stated: "It is the policy of the United States that the scope of that immunity should be clarified: the immunity should not extend beyond its text and purpose to provide protection for those who purport to provide users a forum for free and open speech, but in reality use their power over a vital means of communication to engage in deceptive or pretextual actions stifling free and open debate by censoring certain viewpoints." § 2(a). The order directed all executive departments and agencies to adopt this interpretation of § 230(c). § 2(b). And it directed the NTIA to petition the FCC, requesting the FCC adopt regulations clarifying § 230 along these same lines. § 2b. The order also directed executive departments and agencies to take account of this new policy statement when spending for marketing and advertising on Internet platforms. § 3. Additionally, the order asked the FTC to consider taking action, under its "unfair and deceptive trade practice" authority, against platforms that engage in bias. § 4. Finally, the order directed the Attorney General to convene a working group of states to exercise their unfair or deceptive acts and practices and antidiscrimination laws and to propose federal legislation to promote the policy objectives of the order. §§ 5, 6.

Think back to Chapter Fourteen. What are the best arguments that the FCC does, or does not, have authority to adopt rules interpreting § 230? In *Iowa Utilities Board* (excerpted on page 274 of the casebook), the Supreme Court said that the FCC has the authority to adopt pricing rules for unbundled network elements because it had authority to make rules over all provisions of Title II. Although § 230 itself does not refer to any action (rulemaking or otherwise) by the FCC, § 230 is a part of Title II. How do the precedents relating to § 706, which does specify some FCC action, help or hurt the case for FCC authority? Would you find it surprising to think that § 230 is the type of statute the FCC has authority to implement, when it does not have any other regulatory authority over Internet platforms?

Insert on page 895 after note 4:

5. Government Services. In *Kinderstart*, the court considered and rejected the claim that Google provided governmental services and therefore was limited by the First Amendment. In *Federal Agency of News LLC v. Facebook*, 432 F. Supp. 3d 1107 (N.D. Cal. 2020), the court rejected a similar argument made against Facebook, by a Russian company alleging that Facebook's removal of its account violated free speech protections. The court also rejected arguments that Facebook was engaged in joint action or a conspiracy with the U.S. government.

CHAPTER 16

Direct Regulation of Content Deemed Valuable

Insert on page 1006 after note 15:

16. Paring Back. In 2019 the Commission modestly altered the children’s television programming rules. Children’s Television Programming Rules, Report and Order and Further Notice of Proposed Rulemaking, 34 FCC Rcd. 5822 (2019). Most notably, the rules count as core programming some educational specials and other programming that is not regularly scheduled. They also permit broadcasters to air up to 13 hours per quarter of regularly scheduled programming on a multicast stream rather than on their primary stream (or channel). These changes reduce the required amount of regularly scheduled programming on a broadcaster’s main stream. As a dissenting commissioner noted, “our new rules will allow broadcasters to air less than one hour of regularly scheduled children’s programming per month on their most widely viewed primary stream. One third of a broadcaster’s annual hours can be moved to an unpopular multicast stream, and an additional third will not need to be regularly scheduled.” *Id.* at 5895 (dissenting statement of Commissioner Geoffrey Starks). But the changes in the 2019 Order are much smaller than the seismic shifts we saw in the orders excerpted in the casebook. Does the modesty of these changes indicate that the disagreements over children’s programming have become narrower? That being “regularly scheduled” or on a broadcaster’s primary stream is not very meaningful to many people? That many people might (or do) want regularly scheduled programming on a broadcaster’s primary stream, but they have less influence than broadcasters? All of the above? None of the above?