United States Court of Appeals

FOR THE DISTRICT OF COLUMBIA CIRCUIT

Argued February 1, 2019 Decided October 1, 2019

No. 18-1051

MOZILLA CORPORATION,
PETITIONER

v.

FEDERAL COMMUNICATIONS COMMISSION AND UNITED STATES OF AMERICA,
RESPONDENTS

CITY AND COUNTY OF SAN FRANCISCO, ET AL.,
INTERVENORS

Consolidated with 18-1052, 18-1053, 18-1054, 18-1055, 18-1056, 18-1061, 18-1062, 18-1064, 18-1065, 18-1066, 18-1067, 18-1068, 18-1088, 18-1089, 18-1105

On Petitions for Review of an Order of the Federal Communications Commission

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Pantelis Michalopoulos and *Kevin Kendrick Russell* argued the causes for non-government petitioners. With them on the joint briefs were *Cynthia L. Taub*, *Markham C. Erickson*, *Michael A. Cheah*, *Brian M. Willen*, *Donald J. Evans*, *Sarah J. Morris*, *Matthew F. Wood*, *Colleen Boothby*, *James N. Horwood*, *Tillman L. Lay*, *Jeffrey M. Bayne*,

Katherine J. O'Konski, *Andrew Jay Schwartzman*, *Harold J. Feld*, and *Lisa A. Hayes*. *Keenan P. Adamchak* and *Kevin S. Bankston*, entered appearances.

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Commonwealth of Virginia, *Samuel T. Towell*, Deputy Attorney General, *Robert W. Ferguson*, Attorney General, Office of the Attorney General for the State of Washington, *Tiffany Lee*, Assistant Attorney General, *Dennis J. Herrera*, and *William K. Sanders*. *Bryan C. Yee*, Deputy Attorney General, Office of the Attorney General for the State of Hawai'i, *Sarah E. Kurtz*, Deputy Attorney General, Office of the Attorney General for the State of California, *Michael C. Wertheimer*, Assistant Attorney General, and *John S. Story*, Attorney, Office of the Attorney General for the State of Connecticut, *Theresa C. Mueller*, *Jennifer M. Murphy*, and *James B. Ramsey*, entered appearances.

Christopher Jon Sprigman was on the brief for *amici curiae* Members of Congress in support of petitioners.

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19 other education and library associations in support of petitioners.

Henry Goldberg and *Devendra T. Kumar* were on the brief for *amicus curiae* eBay Inc. in support of petitioners.

Adrienne E. Fowler was on the brief for *amicus curiae* Twilio Inc. in support of petitioner.

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Thomas H. Vidal was on the brief for *amici curiae* Professors Scott Jordan and Jon Peha in support of petitioners.

Michael J. Burstein was on the brief for *amici curiae* Professors of Communications Law in support of petitioners.

Paul Goodman and *Yosef Getachew* were on the brief for *amici curiae* Common Cause, et al. in support of petitioners and vacation of the order.

William Michael Cunningham, *pro se*, was on the brief for *amicus curiae* William Michael Cunningham in support of the public interest.

Thomas M. Johnson Jr, General Counsel, Federal Communications Commission, argued the cause for respondents. With him on the brief were *Kristen C. Limarzi* and *Nickolai G. Levin*, Attorneys, U.S. Department of Justice, *David M. Gossett*, Deputy General Counsel, Federal Communications Commission, *Jacob M. Lewis*, Associate General Counsel, and *James M. Carr* and *Scott M. Noveck*, Counsel. *Robert J. Wiggers*, Attorney, U.S. Department of

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Jonathan E. Nuechterlein argued the cause for ISP intervenors. On the brief were *Michael K. Kellogg*, *Scott H. Angstreich*, *Helgi C. Walker*, *Andrew G.I. Kilberg*, *Miguel A. Estrada*, *Matthew A. Brill*, *Matthew T. Murchison*, *Jeffrey A. Lamken*, and *Stephen E. Coran*. *C. Frederick Beckner*, *III*, *Rick Chessen*, *Kellam M. Conover*, *Neal M. Goldberg*, *Theodore B. Olson*, and *Michael S. Schooler* entered appearances.

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Tara M. Corvo and *Jonathan Markman* were on the brief for *amici curiae* Richard Bennett, et al. in support of respondents.

Thomas R. McCarthy was on the brief for *amici curiae* Washington Legal Foundation, et al. in support of respondents.

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Charles Kennedy and *James Dunstan* were on the brief for *amicus curiae* TechFreedom in support of respondents.

Arthur J. Burke was on the brief for *amicus curiae* Information Technology and Innovation Foundation in support of respondents.

Robert N. Weiner was on the brief for *amici curiae* The Georgetown Center for Business and Public Policy and Nine Prominent Economists and Scholars in support of respondents.

Leonid Goldstein, *pro se*, was on the brief as an intervenor in support of respondents.

John P. Elwood, *Matthew X. Etchemendy*, *Peter C. Tolsdorf*, *Kevin W. Brooks*, *Dileep S. Srihari*, and *Daryl Joseffer* were on the brief for *amici curiae* The National Association of Manufacturers, et al. in support of respondents.

David P. Murray was on the brief for *amici curiae* The International Center for Law and Economics and Participating Scholars in support of respondents.

Robert G. Kirk was on the brief for *amicus curiae* Roslyn Layton in support of respondents.

J. Wade Lindsay was on the brief for *amicus curiae* Tech Knowledge in support of respondents.

Christopher S. Yoo was on the brief for *amicus curiae* Christopher S. Yoo in support of respondents.

Andrew Grimm was on the briefs for intervenor Digital Justice Foundation, Inc. in support of neither party.

Before: MILLETT and WILKINS, *Circuit Judges*, and WILLIAMS, *Senior Circuit Judge*.

Opinion for the Court filed PER CURIAM.

Concurring opinion filed by *Circuit Judge* MILLETT.

Concurring opinion filed by *Circuit Judge* WILKINS.

Opinion concurring in part and dissenting in part filed by *Senior Circuit Judge* WILLIAMS.

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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, Pub. L. 104–104, 110 Stat 56 ("the Act"). *See In re Restoring Internet Freedom*, 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.

Petitioners—an array of Internet companies, non-profits, state and local governments, and other entities—bring a host of challenges to the 2018 Order. We find their objections unconvincing for the most part, though we vacate one portion of the 2018 Order and remand for further proceedings on three discrete points.

The 2018 Order and today's litigation represent yet another iteration of a long-running debate regarding the regulation of the Internet. We rehearsed much of this complex history in *United States Telecom Association v. FCC*, 825 F.3d 674, 689–697 (D.C. Cir. 2016) ("USTA"), and see no need to recapitulate here what was so well and thoroughly said there. In the interest of reader-friendliness, though, we briefly review certain highlights necessary to understand this opinion.

As relevant here, the 1996 Telecommunications Act creates two potential classifications for broadband Internet: "telecommunications services" under Title II of the Act and "information services" under Title I. These similar-sounding terms carry considerable significance: Title II entails common carrier status, *see* 47 U.S.C. § 153(51) (defining "telecommunications carrier"), and triggers an array of statutory restrictions and requirements (subject to forbearance

at the Commission's election). For example, Title II "declar[es] * * * unlawful" "any * * * charge, practice, classification or regulation that is unjust or unreasonable." *Id.* § 201(b). By contrast, "information services" are exempted from common carriage status and, hence, Title II regulation.

An analogous set of classifications applies to mobile broadband: A "commercial mobile service" is subject to common carrier status, *see* 47 U.S.C. § 332(c)(1), whereas a "private mobile service" is not, *see id.* § 332(c)(2).

The Commission's authority under the Act includes classifying various services into the appropriate statutory categories. *See National Cable & Telecomms. Ass'n v. Brand X Internet Servs.*, 545 U.S. 967, 980–981 (2005). In the years since the Act's passage, the Commission has exercised its classification authority with some frequency.

Initially, in 1998, the Commission classified broadband over phone lines as a "telecommunications service." *See In re Deployment of Wireline Services Offering Advanced Telecommunications Capability*, 13 FCC Rcd. 24012 (1998).

Just four years later, though, the Commission determined that cable broadband was an "information service," *see In re Inquiry Concerning High-Speed Access to the Internet over Cable and Other Facilities* ("*Cable Modem Order*"), 17 FCC Rcd. 4798 (2002), a choice that the Supreme Court upheld in *Brand X*, 545 U.S. 967. The agency then applied a similar classification to wireline and wireless broadband. *See In re Appropriate Framework for Broadband Access to the Internet over Wireline Facilities*, 20 FCC Rcd. 14853 (2005) ("*2005 Wireline Broadband Order*"); *In re Appropriate Regulatory Treatment for Broadband Access to the Internet over Wireless Networks*, 22 FCC Rcd. 5901 (2007) ("*Wireless Broadband Order*").

But in 2015 the Commission took the view that broadband Internet access is, in fact, a "telecommunications service" and that mobile broadband is a "commercial mobile service." *See In re Protecting and Promoting the Open Internet*, 30 FCC Rcd. 5601 (2015) ("*Title II Order*"). In *USTA*, this court upheld that classification as reflecting a reasonable interpretation of the statute under *Chevron*'s second step. *See* 825 F.3d at 701–706, 713–724; *see also Chevron, U.S.A., Inc. v. Natural Res. Def. Council*, 467 U.S. 837 (1984).

Once again, the Commission has switched its tack. In 2017, the Commission issued a notice of proposed rulemaking seeking to revert to its pre-2015 position, *In re Restoring Internet Freedom*, 32 FCC Rcd. 4434 (2017), and released the final order at issue in this case in January 2018.

The 2018 Order accomplishes a number of objectives. First, and most importantly, it classifies broadband Internet as an "information service," *see 2018 Order* ¶¶ 26–64, and mobile broadband as a "private mobile service," *see id.* ¶¶ 65–85. 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. *See id.* ¶¶ 209–38. 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, *see id.* ¶¶ 304–323, 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, *see id.* ¶¶ 140–154. The Commission likewise finds that the burdens of the Title II Order's conduct rules exceed their benefits. *See id.* ¶¶ 246–266.

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. *2018 Order* ¶ 195. 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." 545 U.S. at 974. The Commission's classification of cable modem as an "information service" was not challenged in *Brand X*, *see id*. at 987, but, given that "telecommunications service" and "information service" have been treated as mutually exclusive by the Commission since the late 1990s, *see, e.g.*, *2018 Order* ¶¶ 53, 62 & n.239; *Title II Order* ¶ 385, a premise Petitioners do not challenge, *see* Mozilla Br. 24, 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 distinct from "telecommunications," *see id*. § 153(50)), 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. As we will see, the Commission regards this requirement as being met by specific information-processing features that are, in its view, functionally integrated with broadband service, particularly Domain Name Service ("DNS") and caching, about which more later. (Petitioners themselves treat the Commission's DNS/caching argument as "an alternative ground" for the Commission's classification. Mozilla Reply Br. 21.)

Our review is governed by the familiar *Chevron* framework in which we defer to an agency's construction of an ambiguous provision in a statute that it administers if that construction is reasonable. *See, e.g.*, *American Elec. Power Serv. Corp. v. FCC*, 708 F.3d 183, 186 (D.C. Cir. 2013) (The *Chevron* framework "means (within its domain) that a 'reasonable agency interpretation prevails.'") (quoting *Northern Nat. Gas Co. v. FERC*, 700 F.3d 11, 14 (D.C. Cir. 2012)). By the same token, if "Congress has directly spoken to an issue then any agency interpretation contradicting what Congress has said would be unreasonable." *Entergy Corp. v. Riverkeeper, Inc.*, 556 U.S. 208, 218 n.4 (2009).

At *Chevron* Step One, we ask "whether Congress has directly spoken to the precise question at issue." 467 U.S. at 842. Where "the intent of Congress is clear, that is the end of the matter; for [we], as well as the agency, must give effect to the unambiguously expressed intent of Congress." *Id.* at 842–843. But if "the statute is silent or ambiguous with respect to the specific issue," we proceed to *Chevron* Step Two, where "the question for the court is whether the agency's answer is based on a permissible construction of the statute." *Id.* at 843. However, we do not apply *Chevron* reflexively, and we find ambiguity only after exhausting ordinary tools of the judicial craft. *Cf. Kisor v. Wilkie*, 139 S. Ct. 2400, 2414–2415 (2019).

All this of course proceeds in the shadow of *Brand X*, which itself applied *Chevron* to a similar issue.

Applying these principles here, we 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*, 467 U.S. at 845). As we said in *USTA*, "Our job is to ensure that an agency has acted 'within the limits of [Congress's] delegation' of authority," 825 F.3d at 697 (quoting *Chevron*, 467 U.S. at 865), and "we do not 'inquire as to whether the agency's decision is wise as a policy matter; indeed, we are forbidden from substituting our judgment for that of the agency,'" *id*. (quoting *Association of Am. Railroads v. ICC*, 978 F.2d 737, 740 (D.C. Cir. 1992)); *see also United States Telecom Ass'n v. FCC*, 855 F.3d 381, 384 (D.C. Cir. 2017) ("[T]he [*Brand X*] Court made clear in its decision—over and over—that the Act left the [classification] to the agency's discretion." (Srinivasan, J., joined by Tatel, J., concurring in denial of rehearing en banc)).

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 973–974, 989–992. 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 e-mail 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 e-mail 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.

As to the first step, the Court observed that "[a] user cannot reach a third party's Web site without DNS," *Brand X*, 545 U.S. at 999, which "among other things, matches the Web page addresses that end users type into their browsers (or 'click' on) with the Internet Protocol (IP) addresses of the servers containing the Web pages the users wish to access," *id*. at 987. It therefore saw it as "at least reasonable" to treat DNS *itself* "as a 'capability for acquiring * * * retrieving, utilizing, or making available' Web site addresses and therefore part of the information service cable companies provide." *Id*. at 999 (quoting 47 U.S.C. § 153(24)); *see also id*. at n.3 (rebutting dissent's claim that "DNS does not count as use of the

information-processing capabilities of Internet service"). The Court applied a cognate analysis to caching, which "facilitates access to third-party Web pages by offering consumers the ability to store, or 'cache' popular content on local computer servers," *id*. at 999, "obviat[ing] the need for the end user to download anew information from third-party Web sites each time the consumer attempts to access them," *id*. at 999–1000. Thus the Court found "reasonable" the FCC's position that "subscribers can reach third-party Web sites via 'the World Wide Web, and browse their contents, [only] because their service provider offers the capability for * * * acquiring, [storing] * * * retrieving [and] utilizing * * * information.'" *Id*. at 1000 (alterations in original) (some internal quotation marks omitted) (quoting *In re Federal-State Joint Bd. on Universal Serv.*, 13 FCC Rcd. 11501, 11537–11538 ¶ 76 (1998) ("*Stevens Report*")).

As to the second step, the *Brand X* Court endorsed the FCC's position that—because DNS and caching are "inextricably intertwined" with high-speed transmission—it was reasonable for the Commission *not* to treat the resulting package as an "offering" of a standalone "telecommunications service." 545 U.S. at 978–979, 989–991; *see Cable Modem Order* at 4823 ¶ 38 ("As currently provisioned, cable modem service is a single, integrated service that enables the subscriber to utilize Internet access service * * * ."). "[H]igh-speed transmission used to provide cable modem service is a *functionally integrated* component of [cable modem] service because it transmits data only in connection with the further processing of information and is necessary to provide Internet service." *Brand X*, 545 U.S. at 998 (emphasis added). DNS and caching, in turn, are two examples of such "further processing" integrated with the data transmission aspect of cable modem service. "[A] consumer cannot purchase Internet service without also purchasing a connection to the Internet and

the transmission always occurs in connection with information processing," *id*. at 992, in the form of (for example) DNS or caching. Thus, according to the Supreme Court, the Commission reasonably concluded that cable modem service is not an offering of a standalone "telecommunications service," but, rather, an "information service"—which by definition is offered "via telecommunications." *See id.* at 989–992*; see also 2018 Order* ¶ 52.

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. *See, e.g*., *2018 Order* ¶¶ 26, 34, 41, 51, 53, 54, 55 n.207, 57. 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. *Id*. ¶ 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.

We note that the 2018 Order alluded to several "information processing functionalities inextricably intertwined with the underlying service" besides DNS and caching, such as "email, speed test servers, backup and support services, geolocation-based advertising, data storage, parental controls, unique programming content, spam protection, pop-up blockers, instant messaging services, on-the-go access to Wi-Fi hotspots, and various widgets, toolbars, and applications." *2018 Order* ¶ 33 n.99. Although the 2018 Order states that these "further support the 'information service' classification," it did not find them "determinative," *id*., and

mentioned them only briefly in a footnote. Thus we address DNS and caching only.

In passages echoing *Brand X*, the Commission characterized the essential roles of DNS and caching. As to DNS, it observed that DNS is "indispensable to ordinary users as they navigate the Internet." *2018 Order* ¶ 34 (quoting AT&T Comments at 73, J.A. 189). "[T]he absence of ISP-provided DNS would fundamentally change the online experience for the consumer." *Id*. This formulation is actually a good deal more cautious than that of the Court in *Brand X*, which declared that without DNS a "user cannot reach a third party's Web site." 545 U.S. at 999. In fact users who know the necessary IP addresses could enter them for each relevant server. But the Commission and the Court (the latter more emphatically) are making an undeniable pragmatic point—that use of the Web would be nightmarishly cumbersome without DNS.

As to caching, the Commission explained that it "provides the capability to perform functions that fall within the information service definition," *2018 Order* ¶ 41, including, but not limited to, "enabl[ing] the user to obtain more rapid retrieval of information through the network," *id*. (quoting Information Technology and Innovation Foundation ("ITIF") Comments at 13, WC Dkt. No. 17-108 (July 17, 2017) (quoting, in turn, *Title II Order* ¶ 372)). Operating a caching service entails running "complex algorithms to determine what information to store where and in what format," *id*. (quoting ITIF Comments at 13), so that "caching involves storing and retrieving capabilities required by the 'information service' definition," *id*. Thus the Commission added technical detail reinforcing the *Brand X* Court's statements as to caching. *See* 545 U.S. at 999–1000.

The Commission then summarized these points, again in terms resonating with those in which *Brand X* had endorsed the 2002 Cable Modem Order. It argued that "ISPs offer a single, inextricably intertwined information service," *2018 Order* ¶ 49, based in part on the functionalities of DNS and caching. It said that "all broadband Internet access services rely on DNS and commonly also rely on caching by ISPs," *id*. ¶ 48, and contended that DNS and caching should be "understood as part of a single, integrated information service offered by ISPs," *id*. ¶ 50; *see also id*. ¶ 42. It then maintained, drawing on *Brand X*, that "[w]here * * * a service involving transmission inextricably intertwines that transmission with information service capabilities—in the form of an integrated information service—there cannot be 'a "stand-alone" offering of telecommunications * * * ,'" *id*. ¶ 53 (quoting *Brand X*, 545 U.S. at 989), in line with the Commission's stance in *Brand X*. "[A]n offering like broadband Internet access service that 'always and necessarily' includes integrated transmission and information service capabilities * * * [is] an information service." *Id*. ¶ 55 (quoting *Brand X*, 545 U.S. at 992).

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 e-mail," 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, *see id*. at 998–1000. We thus reject Petitioners' attempt to discredit the Commission's sensible reliance on *Brand X*'s treatment of DNS and caching. *See, e.g.*, *2018 Order* ¶¶ 10, 34, 41, 51; *see also* Part I.C.4 *infra* (addressing Petitioners' related claims in functional integration context).

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. *See* Mozilla Br. 43–46. We find that Petitioners' arguments do not hold up, either because they rest on a misreading of *Brand X* and *USTA* or do not adequately grapple with the Commission's reasonable explanation as to why DNS and caching fall outside that exception. *See 2018 Order* ¶¶ 36–38, 42–44. 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. *See Brand X*, 545 U.S. at 999 n.3.

In deciding whether to slot DNS and caching under the TME the Commission confronted "archetypal *Chevron* questions[] about how best to construe an ambiguous term in

light of competing policy interests." *City of Arlington v. FCC*, 569 U.S. 290, 304 (2013). "[I]f the implementing agency's construction is reasonable, *Chevron* requires a federal court to accept the agency's construction of the statute, even if the agency's reading differs from what the court believes is the best statutory interpretation." *Brand X*, 545 U.S. at 980. And when an agency changes course, as it did here, it "must show that there are good reasons for the new policy," but "it need not demonstrate to a court's satisfaction that the reasons for the new policy are *better* than the reasons for the old one." *USTA*, 825 F.3d at 707 (quoting *FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 515 (2009)). The Commission clears this bar.

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.

Despite Petitioners' objections, we find that the 2018 Order engages in reasonable line-drawing for purposes of administering this amorphous exception. Relying on judicial

precedent, Department of Justice policy (developed pursuant to its duty to see that the settlement of its antitrust suit against AT&T was lawfully implemented), and prior Commission statements, the 2018 Order seems to envision a continuum with two poles: a user-centered pole and network management-centered pole. It locates a given service on the continuum and classifies it as falling within or outside the TME according to which pole it appears closest to. 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*. It would be folly to deny as much given that the raison d'être of ISPs is to serve their customers. 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, J.A. 2857; *see 2018 Order* ¶ 38 n.135; *see also* Mozilla Reply Br. 19–20.

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). And it gives examples of services that in its view are genuine TME services: Simple Network Management Protocol ("SNMP"), Network Control Protocol ("NETCONF"), or Data Over Cable Service Interface Specification ("DOCSIS") bootfiles for controlling the configuration of cable modems. *Id*. ¶ 36 (quoting Sandvine Comments at 5, WC Dkt. No. 17-108 (July 14, 2017)). It observes that the Title II Order had essentially proceeded in a contrary manner, finding that the management-centered functionality of DNS predominated, so as to render it TME-worthy. "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"). *See United States v. American Tel. & Tel. Co.*, 552 F. Supp. 131, 225–232 (D.D.C. 1982) (subsequent history omitted). This decree, which modified a 1956 consent decree and final judgment, spawned a long line of cases in which District Court Judge Harold Greene resolved conflicts over the decree's limits on the BOCs' permissible business ventures. The cases interpreted a broad array of terms of the consent decree, entered many modifications, and granted waivers, balancing a need to "avoid anticompetitive effects" (which might flow from BOC exploitation of their monopolies in telecommunications to dominate related services) with a hope of "bring[ing] th[e] nation closer to enjoyment of the full benefits of the information age" by facilitating "the efficient, rapid, and inexpensive dissemination of * * * information." *United States v. Western Elec. Co.*, 714 F. Supp. 1, 3, 5 (D.D.C. 1988), *aff'd in part, rev'd in part*, 900 F.2d 283 (D.C. Cir. 1990).

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. *Compare American Tel. & Tel. Co.*, 552 F. Supp. at 229, *with* 47 U.S.C. § 153(24). 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*. Accordingly offering the service ran afoul of Section II(D)(1) of the decree, *see American Tel. & Tel. Co.*, 552 F. Supp. 131 at 227, banning the BOCs from providing information services, *see Western Electric*, 1989 WL 119060, at *1. The BOCs argued as a fallback position that TDD services fell within the TME. *Id.* Judge Greene made quick work of this, finding it "patently obvious that what is being sought * * * does not involve the internal management of Bell Atlantic" and hence was not TME-eligible. *Id.* In support of this conclusion the 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." *Western Elec. Co.*, 1989 WL 119060, at *1 (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)).

It is this language that the Commission expressly invokes to ground its interpretation of the TME, stating that it (the Commission) "interpret[s] the concepts of 'management, control, or operation' in the [TME] consistent with" Judge Greene's analysis. *See 2018 Order* ¶ 36. And as we have noted above, the 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 Judge Greene's 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. (As no party objected to the BOCs' offering of TDD services, and BOC entry into this activity posed no anticompetitive risk, the court granted a waiver for their provision. *See Western Elec. Co.*, 1989 WL 119060, at *2.)

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 cabining 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.

Petitioners' objections to the Commission's classification of DNS and reliance on the MFJ do not convince us.

Many of Petitioners' objections pillory a straw man. They state that "[t]he statute asks whether a function is used 'for the management, control, or operation of a telecommunications system,' not whether the function also benefits consumers." Mozilla Br. 45 (quoting 47 U.S.C. § 153(24)). But, as noted before, the Commission need not deny, for example, that "configuration management"—a function it slots under the

TME, *see 2018 Order* ¶ 36 & n.126—benefits end users in some respect. *See* Mozilla Reply Br. 19–20. It can simply say that DNS/caching and (for example) configuration management, respectively, adjoin opposite ends of the spectrum, one meriting inclusion in the TME and the other not.

Petitioners observe that DNS renders broadband Internet access "more efficient in ways that are generally invisible to users," a point that misses its mark entirely, or at best equivocates on the key point at issue. Mozilla Br. 45. While DNS is "invisible" in the sense that it is "under the hood," so to speak, it remains "essential to providing Internet access for the ordinary consumer." *2018 Order* ¶ 36. Using a certain "configuration" tool or protocol might, say, make Internet traffic a bit faster or slower in the way that a metro's use of varying rail technologies might influence train speeds. But an absence of DNS would be something different altogether, hobbling ordinary users in navigating the Web, akin to a total absence of signage in a metro. Signage, unlike DNS, is of course quite apparent, but their user-centered purposes are alike for all practical purposes. (We address in Part I.C.4 Petitioners' separate argument that users' ability to obtain DNS from providers other than their ISPs precludes a finding of functional integration.) So the sense in which DNS is "invisible" to many end users is fully consistent with the agency's rationale for locating it nearer to the user-centric pole—and hence beyond the TME.

Finally, an argument made by amici on behalf of Petitioners as to DNS arguably aligns with claims made by the Commission's amici and so may work in the agency's favor. Petitioners' amici assert in the context of functional integration (an issue to which we turn in Part I.C.4) that broadband Internet access is not functionally integrated with DNS because broadband access works perfectly well *without* DNS. "Internet

architects deliberately created DNS to be entirely independent from the IP packet transfer function," Jordan/Peha Amicus Br. 17, and "a BIAS provider's DNS is an *extraneous capability* * * * not required for the core service," *id*. at 17–18 (emphasis added). But if DNS is "extraneous" to operating the network, it is at least debatable whether DNS is used in "the management, control, or operation of a telecommunications system or the management of a telecommunications service." Amici for the Commission make related points, observing that "[a]n app's DNS translation transaction ends before the BIAS transmission begins," "DNS transactions do not provide the BIAS provider with information about the best path to the destination," and they "do not have the power to either optimize or impair the BIAS provider network." Bennett *et al*., Amicus Br. 13. Thus it is at least reasonable not to view DNS as a network management tool. *Id*. at 13–14. Granted, Jordan and Peha remark that running DNS helps an ISP "reduce[] the volume of DNS queries passing through its network." Jordan/Peha Amicus Br. 18. But in the deferential posture of *Chevron* the points quoted above by Jordan/Peha seem in part to support the Commission's reading of the record (consistent with Bennett *et al*.) as showing that, whereas "little or nothing in the DNS look-up process is designed to help an ISP 'manage' its network," *2018 Order* ¶ 36, DNS is "essential to providing Internet access for the ordinary consumer," *id*., for whom "DNS is a must," *id*. ¶ 34 (quoting *Brand X*, 545 U.S. at 999).

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. It makes clear that ISP caching service is not just "instrumental to pure transmission" but, rather, "enhances

access to information" by consumers by facilitating "rapid retrieval of information from a local cache or repository." *Id*. As the Title II Order had put it (albeit drawing a different lesson), "caching * * * provide[s] a benefit to subscribers in the form of faster, more efficient service," *id.* ¶ 368 n.1037, by "enabling the user to obtain 'more rapid retrieval of information' through the network," *id*. ¶ 372 (quoting *Cable Modem Order*, 17 FCC Rcd. at 4810 ¶ 17 & n.76); *cf. Brand X*, 545 U.S. at 999–1000 (stating that "[c]acheing [sic] obviates the need for the end user to download anew information from third-party Web sites * * * , thereby increasing the speed of information retrieval").

Granted, some ISPs describe caching in terms indicating that it is a network management practice, and caching can help reduce ISPs' costs. *See* Jordan/Peha Amicus Br. 20–21. 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. The Commission found (without contradiction in the record) that caching "enables and enhances consumers' access to and use of information online." *2018 Order* ¶ 42. In particular, "[t]he record reflects that without caching, broadband Internet access service would be a significantly inferior experience for the consumer, particularly for customers in remote areas, requiring additional time and network capacity for retrieval of information from the Internet." *Id*. That is so, the Commission maintains, even though encrypted traffic does not use caching, because "truly pervasive encryption on the Internet is still a long way off[] and * * * many sites still do not encrypt." *Id*. at n.147 (citation omitted).

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 In re Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry)*, 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. The Commission's chief task was to interpret the TME's statutory text in a coherent, workable fashion and offer a reasonable rationale for altering its course, not to demonstrate that its reading is a tight fit with every aspect of adjunct-to-basic precedent. In fact, as we will see, that precedent is not the seamless web of Petitioners' vision.

Petitioners try to catch the Commission in a contradiction in a two-step approach. The agency, as we have seen, locates DNS and caching outside the TME. First, Petitioners invoke Commission precedent seeming to suggest that all or most adjunct-to-basic services would fall under the TME. Second, they observe that—whereas paradigmatic examples of adjunct-to-basic services such as speed dialing and call forwarding are undeniably useful to consumers and, per step one, belong under the TME—the Commission can give no satisfactory explanation for excluding DNS and caching from the TME. In

particular, Petitioners and commenters analogize DNS to ordinary directory assistance, which the Commission has dubbed adjunct-to-basic, since both services help direct users to their chosen endpoints. *See, e.g.*, Mozilla Br. 46; Open Technology Institute ("OTI") New America Comments at 33–34, J.A. 1631–1632. Whence the difference?

To make sense of these claims and the Commission's response, we need to review the basic terms. To preview, even if there are incongruities in the Commission's treatment of the TME vis-à-vis the adjunct-to-basic idea, we see them as byproducts of drawing imperfect analogies.

The FCC created a distinction between "basic services" and "enhanced services" in its *Second Computer Inquiry*, with the latter concept defined as follows:

> [T]he term "enhanced service" shall refer to services[] offered over common carrier transmission facilities used in interstate communications, which employ computer processing applications that act on the format, content, code, protocol or similar aspects of the subscriber's transmitted information; provide the subscriber additional, different, or restructured information; or involve subscriber interaction with stored information. Enhanced services are not regulated under Title II of the Act.

Second Computer Inquiry, 77 F.C.C.2d at 498; *see also* 47 C.F.R. § 64.702(a).[1] In contrast,

[1] Note that the definition of "enhanced services" is restricted to services "offered over common carrier transmission." *Second Computer Inquiry*, 77 F.C.C.2d at 498. For this reason, among others, at least one scholar has argued that caution is warranted in

> In offering a basic transmission service * * * a carrier essentially offers a pure transmission capability over a communications path that is virtually transparent in terms of its interaction with customer supplied information.

Second Computer Inquiry, 77 F.C.C.2d at 420 ¶ 96; *see also id*. at 419–420 ¶ 95 ("[A] basic transmission service should be limited to the offering of transmission capacity between two or more points suitable for a user's transmission needs and subject only to the technical parameters of fidelity or distortion criteria, or other conditioning.").

The most contested category is a third: adjunct-to-basic. It arose to accommodate the reality that providers of ordinary telephone services wished to offer new technologies facilitating that service—technologies that would quite plainly fall under the "enhanced services" definition, though ordinary phone service was indisputably a "basic service." To square the circle and avoid complexities of hybrid treatment, the Commission created an adjunct-to-basic bucket:

> In the [1985] *NATA Centrex* proceeding, the Commission defined adjunct services as services that 'facilitate the provision of basic services without altering their fundamental character,' and determined that such services should be treated as basic services

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drawing overly-neat analogies between "enhanced services" and "information services" on the one hand, and "basic services" and "telecommunications services," on the other. *See* Robert Cannon, *The Legacy of the Federal Communications Commission's Computer Inquiries*, 55 Fed. Comm. L.J. 167, 191–192 (2003) (explaining why all "enhanced services" are "information services" whereas not all "information services" are necessarily "enhanced services").

> for purposes of the *Computer II* rules, even though they might fall within possible literal readings of the definition of enhanced services.

In re Bell Operating Companies, Petitions for Forbearance from the Application of Section 272 of the Commc'ns Act of 1934, as Amended, to Certain Activities, 13 FCC Rcd. 2627, 2639 ¶ 18 (CCB 1998) ("*272 Forbearance Order*") (citation omitted).

The Commission has set out two necessary criteria for a service to qualify as adjunct-to-basic:

> [C]arriers may use some of the processing and storage capabilities within their networks to offer optional tariffed features as 'adjunct to basic' services, if the features: (1) are intended to facilitate the use of traditional telephone service; and (2) do not alter the fundamental character of telephone service.

In re Establishment of a Funding Mechanism for Interstate Operator Servs. for the Deaf, 11 FCC Rcd. 6808, 6816–6817 ¶ 16 (1996) ("*Operator Services Order*").

Which services qualify as adjunct-to-basic? The answer covers a remarkably wide gamut, including "*inter alia*, speed dialing, call forwarding, computer-provided directory assistance, call monitoring, caller i.d., call tracing, call blocking, call return, repeat dialing, and call tracking, as well as certain Centrex features." *In re Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Commc'ns Act of 1934, as Amended*, 11 FCC Rcd. 21905, 21958 ¶ 107 n.245 (1996) ("*Non-Accounting Safeguards Order*"). The same goes for "communications between a subscriber and the network itself for call setup, call routing, call cessation, calling or called party identification, billing, and

accounting," *In re N. Am. Telecommunications Ass'n Petition for Declaratory Ruling Under Section 64.702 of the Commission's Rules Regarding the Integration of Centrex, Enhanced Servs., and Customer Premises Equip.*, 3 FCC Rcd. 4385, 4386 ¶ 11 (1988) ("*Centrex Order*") (citation omitted), and prepaid calling cards with built-in advertisements, *see American Tel. & Tel. Co. v. FCC*, 454 F.3d 329, 331 (D.C. Cir. 2006)—though not "talking yellow pages" with advertisements, *see id*. at 333; *see also Northwest Bell Tel. Co. Petition for Declaratory Ruling*, 2 FCC Rcd. 5986, 5988 ¶ 20 (1987).

Having laid out the key terms, we return to the parties' claims. 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.

First, as explained above, the Commission had adequate grounds to focus on the 1982 MFJ's definition of "information service," which the 1996 Act took over virtually word for word.

Second, devising 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.

Third, the Commission's historical approach to adjunct-to-basic has hardly been clear-cut in its own right. As we have previously said, "it is difficult to discern any clear policy" in the Commission's application of its "various formulations" of

what counts as adjunct-to-basic, so that "[t]he Commission's rulings reflect a highly fact-specific, case-by-case style of adjudication." *American Tel. & Tel. Co.*, 454 F.3d at 333. Given this lack of cohesion, we can hardly fault the current Commission for discounting the persuasive force of adjunct-to-basic analogies in interpreting and applying the 1996 Act's TME in light of its policy views.

Furthermore, the Commission's definition of adjunct-to-basic services does not, as a linguistic matter, force the Commission's hand in interpreting the TME. Just because an adjunct-to-basic service like speed dialing or directory assistance "facilitate[s]" telephone service, *USTA*, 825 F.3d at 691, it hardly follows automatically that it also qualifies under the text of the TME, since it requires no contortion of English to say that (for example) directory assistance is, by and large, not used to "manage[]" or "control" or "operat[e]" a telecommunications system or service, 47 U.S.C. § 153(24).

So the Commission had ample basis to dub the adjunct-to-basic line of analysis "potentially ambiguous precedent," *2018 Order* ¶ 39, and depart from what it regarded as "loose analogies" devised in the Title II Order. "Because broadband Internet access service was not directly addressed in pre-1996 Act *Computer Inquiries* and MFJ precedent, analogies to functions that were classified under that precedent must account for potentially distinguishing characteristics" as they relate to "technical details" and "regulatory backdrop." *Id*. These claims are not unreasonable. Whatever the Commission's prior views on the relationship between basic services and *their* adjuncts, it is reasonable for the Commission to say that that rubric need not transfer over neatly to what it claims *is not* a basic service—broadband Internet access. *See id*. ¶ 40 n.139. Hence there is little basis for the claim that adjunct-to-basic lore requires the Commission to jettison the

lesson of Judge Greene's TDD ruling. *See Western Elec. Co.*, 1989 WL 119060, at *1; *see also* Mozilla Br. 44.

Fourth, the Commission identifies precedent from the *Computer Inquiries* themselves to support a reading of the TME as requiring location of particular services on a spectrum running between utility to carriers and utility to end users. A ruling invoked by the 2018 Order allowed BOCs to enable the tracing of Emergency 911 ("E911") calls to the right location. The FCC's Common Carrier Bureau said:

> Although the "telecommunications management exception" encompasses adjunct services, the storage and retrieval functions associated with the BOCs' automatic location identification databases provide information that is useful to end users, rather than carriers. As a consequence, those functions are not adjunct services and cannot be classified as telecommunications services on that basis.

272 Forbearance Order, 13 FCC Rcd. at 2639 ¶ 18; *see 2018 Order* ¶ 38 n.131. While the Title II Order had sought to distinguish this precedent on the ground that the benefit of E911 service was "unrelated to telecommunications," *Title II Order* ¶ 368, it does not seem unreasonable for the current 2018 Order to assume a broader view of telecommunications in its invocation of this precedent.

Fifth, in any case, we are satisfied with the agency's refusal to treat DNS like speed dialing, call forwarding, and directory assistance.

As already noted, the Commission has adequate grounds not to hold its interpretation of the TME hostage to a chimerical hope for a perfect match-up with adjunct-to-basic precedent, in part because the regulatory history is so convoluted as to render

the likelihood of a "perfect" matchup remote. So even if the Commission's interpretation of the TME comes at the cost of certain incongruities with the concept of adjunct-to-basic services, it reasonably regards alignment with the text and purposes of the 1996 Act, and the unifying policy vision animating the 2018 Order, as more weighty factors. *See 2018 Order* ¶ 39.

Moreover, implicit in the Commission's analysis is a recognition of a key difference between the above services and, at the least, DNS. Those other services are plausibly described as *adjunct*-to-basic, i.e., "ancillary" and "optional" in relation to telephone service. *Centrex Order*, 3 FCC Rcd. at 4389 ¶ 30 (quoting *Second Computer Inquiry*, 77 F.C.C.2d at 421 ¶ 98); *cf. 2018 Order* ¶ 40 n.138. Not so, the Commission says, for DNS, which "[f]or an Internet user * * * is a *must*." *2018 Order* ¶ 34 (quoting *Brand X*, 545 U.S. at 999) (emphasis added) (internal quotation mark omitted). So DNS might well be seen to "alter the fundamental character of [the] service," and would thus fail to satisfy one of the two criteria *specified* by the Commission (and quoted above) for a service to qualify as adjunct-to-basic. *Operator Services Order*, 11 FCC Rcd. at 6816–6817 ¶ 16. This seems to distinguish DNS from such functions as speed dialing, call forwarding, and directory assistance, and thus square the Commission's current treatment of DNS with the Commission's prior treatment of those services as adjunct-to-basic, consistent with Judge Greene's treatment of a certain type of directory assistance as falling within the TME. *See Western Elec. Co.*, 1989 WL 119060, *1 n.7; Mozilla Br. 44–45. (While some adjunct-to-basic services seem non-optional in certain respects, like "communications between a subscriber and the network itself for call setup * * * [and] call cessation," *Centrex Order*, 3 FCC Rcd. at 4386 ¶ 11, this point simply reinforces the miscellaneous nature of the

adjunct-to-basic category, where "it is difficult to discern any clear policy," *American Tel. & Tel. Co.*, 454 F.3d at 333.)

We find the above considerations sufficient to uphold the agency's position and hence do not address analogies to other MFJ precedents on technologies and services. *See 2018 Order* ¶¶ 35, 43–44. Even if Petitioners offer plausible interpretations of rulings on address translation and third-party storage services provided by the BOCs, we believe the Commission has given a sufficiently sturdy justification for treating DNS and caching as non-TME services apart from other MFJ-linked analogies. It has set forth a plausible reading of the highly ambiguous TME, adequately explained its basis for giving more credence to judicial MFJ precedent than to the *Computer Inquiries* in this context, and made a reasonable case as to why DNS and caching need not be classed under the TME.

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. Mozilla Br. 46. They make three arguments in support of this thesis, but none holds water. 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 (quoting *Stevens Report* ¶ 79).

Petitioners first play up the facts that users may obtain DNS from providers other than their ISPs and that caching is not utterly indispensable. According to them, because "a user can easily configure her computer to use a third-party DNS server and content can be delivered even without caching,"

Mozilla Br. 46, especially in the context of encrypted communications that occur without caching, *id*. at 46–47, it follows that DNS and caching are not "inextricably intertwined with the transmission component" of broadband, *id*. at 46. These facts ostensibly yield a "contradict[ion]" in the agency's position, since one's ISP-provided DNS and caching are not "indispensable" after all. *Id*.

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. Given the ambiguity in the term "offe[r]," *see Brand X*, 545 U.S. at 989–990, the Commission's preferred reading of that term rather than the Title II Order's "narrower interpretation," *2018 Order* ¶ 50—which would foreclose the Commission's view quoted above—is permissible. In elucidating the ambiguity, *Brand X* said that "[t]he entire question is whether the products here are functionally integrated (like the components of a car) or functionally separate (like pets and leashes). That question turns not on the language of the Act, but on the factual particulars of how Internet technology works and how it is provided, questions *Chevron* leaves to the Commission to resolve in the first instance." 545 U.S. at 991. 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. The transmission aspect, they say, overshadows DNS and caching in "importance," where that concept is understood in terms of what "consumers focus on," *id*. (quoting *USTA*, 825 F.3d at 698), and what aspect has "dominance in the broadband experience," *id*.; *see also* Mozilla Reply Br. 24. The supposedly miniscule "importance" of DNS and caching in consumers' minds when using the Web means that those functionalities cannot be "inextricably intertwined" with high-speed transmission—and hence broadband cannot be an "information service" based on DNS and caching services.

These claims are unavailing. To begin with, Petitioners' invocation of *USTA* is yet again misplaced. There we said simply that the Commission *reasonably* determined what "consumers focus on," *USTA*, 825 F.3d at 698, without holding that that is the only permissible view. Moreover, nowhere does *Brand X* say that a finding of "functional integration" requires a finding as to "dominance" or "relative importance" in the sense Petitioners imply. Average consumers, presumably, are no less in the dark now about the inner workings of DNS and caching than they were in 2005 when the Court decided *Brand X*. 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. However "consumer perception" might be understood, it is not unreasonable to interpret it as reflected in a consumer's *use* of the offered service as a whole and the functionalities that make that possible, even if the consumer has no inkling of what is "under the hood." As *Brand X* said, "Seen from the consumer's point of view, the Commission concluded, cable modem service is not a telecommunications offering because the consumer *uses* the high-speed wire always in connection with the information-

processing capabilities provided by Internet access * * * ." 545 U.S. at 988 (emphasis added). So it is perfectly sensible for the agency to retort that "[w]hile the typical broadband subscriber may know little or nothing about DNS or caching, that subscriber would keenly feel the absence of those functions" in everyday Web use. Commission Br. 43.

Petitioners reply that the argument proves too much, as Web browsers and search engines are also essential to the consumer's Internet experience. *See* Mozilla Reply Br. 24. But quite apart from the fact that the role of ISP-provided browsers and search engines appears very modest compared to that of DNS and caching in ISPs' overall provision of Internet access, Petitioners are in a weak posture to deny that inclusion of "search engines and web browsers" could support an "information service" designation, *id*., since those appear to be examples of the "walled garden" services that Petitioners hold up as models of "information service"-eligible offerings in their gloss of *Brand X*.

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. "The FCC could not have reasonably concluded that a drop of DNS and caching in a sea of transmission transformed the service into something that could properly be called an information service." *Id*. The idea seems to be that ISPs now offer fewer "walled garden" services of the kind consumers mostly care about than they did in the era of the 2002 Cable Modem Order and *Brand X*, so that basing an "information service" designation on DNS and caching alone is currently as dubious as saying that a few golden threads interwoven in an ordinary sweater turn the sweater into a golden garment. "Congress could not have intended inclusion of two minor auxiliary information services to transform the

classification of what is otherwise overwhelmingly telecommunications." Mozilla Reply Br. 25.

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. Had the Court thought along Petitioners' lines, it could have sided with challengers in *Brand X* by saying that—when users wander beyond ISPs' proprietary services—the quantum of ISP-offered "information services" shrinks so greatly in proportion to the transmission aspect that in that realm they are accepting an "offering" of standalone telecommunications service. The Court took the opposite tack, marshaling DNS and caching as examples of "information services" operative when users "access[] content provided by parties other than the cable company," *Brand X*, 545 U.S. at 998, thereby rendering the Commission's classification "reasonable," *id*. at 1000.

Petitioners try to get mileage from a hypothetical in *Brand X* involving the bundling of telephone service with voicemail, *see* Mozilla Br. 47, but the attempt falls far short. Challengers in *Brand X* had argued that, on the FCC's theory in that case, a telephone-plus-voicemail bundle would have to be classified as an "information service," making it far too easy to evade the reach of Title II. The Court declined to "decide whether a construction that resulted in these consequences would be unreasonable"—because the hypothetical misfired. *Brand X*, 545 U.S. at 997. Its result "d[id] not follow from the construction the Commission adopted," *id*., which was "more limited than respondents [had] assume[d]," *id*. at 998. That is, the FCC's position "*d*[*id*] *not* leave all information-service offerings exempt from mandatory Title II regulation." *Id*. at 997 (emphasis added). A landline telephone service provider

could not—on the FCC's theory as interpreted by the Court—get away with "packag[ing] voice mail [or a time-of-day announcement] with telephone service" and on that basis take landline service out of Title II. *Id*. at 998. That gimmick must fail because add-ons like voicemail and time-of-day announcements are separable from "pure transmission" in a way that is not true for DNS and caching in relation to broadband. Whereas landline service "transmits information independent of the information-storage capabilities provided by voice mail," and is "only trivially dependent on the information service the [time-of-day] announcement provides," *id*., broadband involves "functional[] integrat[ion]" between "high-speed transmission," which is "necessary to provide Internet service," with "further processing of information," *id*., e.g., in the form of DNS and caching, *see id*. at 998–1000. The *Brand X* Court, in short, made plain that the challengers' hypothetical was simply irrelevant. Since Petitioners develop no credible explanation as to why the current Commission's theory is any more vulnerable to the hypothetical discredited by *Brand X*, we can see no merit in their criticism.

To summarize, just as the *USTA* petitioners "fail[ed] to provide an unambiguous answer to" whether "broadband providers make a standalone offering of telecommunications," *USTA*, 825 F.3d at 702, Petitioners have not done so here. Nor have they shown the Commission's stance to be unreasonable. 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).

The 2018 Order readopted definitions of "public switched network" and "interconnected service" that the Commission had set out in the Second CMRS Report and Order of 1994,

2018 Order ¶ 74; *see In re Implementation of Sections 3(n) and 332 of the Commc'ns Act; Regulatory Treatment of Mobile Servs.*, 9 FCC Rcd. 1411, 1516–1517 § 20.3 (1994) ("*Second CMRS Report and Order*"), and maintained until the Title II Order of 2015.

First, the Commission now defines "the public switched network" as:

> [A]ny common carrier switched network, whether by wire or radio, including local exchange carriers, interexchange carriers, and mobile service providers, that use[s] the [ten-digit] North American Numbering Plan [NANP] in connection with the provision of switched services.

2018 Order ¶ 66 (second alteration in original); *see* 47 C.F.R. § 20.3; *see also CMRS Report and Order*, 9 FCC Rcd. at 1517 § 20.3. The Title II Order, by contrast, modified that definition by inserting the phrase "or public IP addresses":

> [T]he network that includes any common carrier switched network, whether by wire or radio, including local exchange carriers, interexchange carriers, and mobile service providers, that use[s] the North American Numbering Plan, *or public IP addresses*, in connection with the provision of switched services.

Title II Order ¶ 391 (second alteration in original) (emphasis added). This insertion assisted the Title II Order in making a case that mobile broadband was "interconnected" with the newly redefined public switched network.

As for "interconnected service," the Commission now defines it as "a service 'that gives subscribers the capability to communicate to or receive communication from *all* other users

on the public switched network.'" *2018 Order* ¶ 77 (quoting 47 C.F.R. § 20.3); *see Second CMRS Report and Order*, 9 FCC Rcd. at 1516 § 20.3. Restoring "all" was again a reversion to the agency view since the 1994 Second CMRS Report and Order. *See 2018 Order* ¶ 77. The Title II Order had deleted that word, explaining the change at least in part as a recognition of the already accepted view that services reaching North American Numbering Plan ("NANP") numbers generally could meet Section 332(d)(1)'s requirement of interconnectedness despite the existence of some blocked NANP numbers (such as 900 numbers). *See Title II Order* ¶ 402 & n.1172.

Finally, the Commission readopted the Second CMRS Report and Order's "functional equivalence" test, which considers "a variety of factors" in making that determination. *2018 Order* ¶ 83. The "principal inquiry will involve evaluating consumer demand for the service in order to determine whether the service is a close substitute for [a commercial mobile radio service]," which entails "evaluat[ing] whether changes in price for the service under examination, or for the comparable commercial service, would prompt customers to change from one service to the other." *Second CMRS Report and Order*, 9 FCC Rcd. at 1447–1448 ¶ 80.

Viewing these definitions in the policy-driven mode endorsed by *Brand X* (*see, e.g.*, 545 U.S. at 992), 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. As we said in *USTA*, clashing classifications between mobile and fixed broadband services would yield a "counterintuitive

outcome" in which a "mobile device could be subject to entirely different regulatory rules depending on how it happens to be connected to the internet at any particular moment." 825 F.3d at 724. Just as the Title II Order strove to avoid a "statutory contradiction" that would arise if mobile broadband were classified differently from broadband Internet, *see Title II Order* ¶ 403, the Commission now opted to treat mobile broadband as a "private mobile service." Parallel classifications, it explained, would "further[] the Act's overall intent to allow information services to develop free from common carrier regulations" and tally with the Commission's policy rationales for classifying broadband as an "information service." *2018 Order* ¶ 82; *see also id.* ¶ 83 n.308; *cf. Wireless Broadband Order* 5919–5921 ¶¶ 48–56 (2007) (explaining importance of avoiding a contradictory outcome in classifying broadband Internet access and mobile broadband). Petitioners accept the general proposition, though with an inverse spin: They say that if we were to reject the Commission's "information service" classification, that refusal *in itself* "would be a powerful factor in favor of concluding that mobile BIAS is a commercial mobile service," because it "would be unreasonable to construe the statute to create * * * a contradiction." Mozilla Br. 79.

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 717–718 (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.

We likewise see no basis for a view that the statutory language compels the Commission to retain the phrase "or public IP address," which the Title II Order had inserted into the definition of "public switched network." We note, as we did in *USTA*, that the agency acts under express statutory authority to modify its definition: The term "the public switched network" is to be "defined by regulation by the Commission." 47 U.S.C. § 332(d)(2); *see USTA*, 825 F.3d at 717–718; *Title II Order* ¶ 396. Further, the Commission offers multiple textual grounds in favor of its reading, emphasizing Congress's use of the definite article ("*the* public switched network") and "network" in the singular, suggesting that "Congress intended 'public switched network' to mean a

single, integrated network." *2018 Order* ¶ 76; *cf. United States v. Manafort*, 897 F.3d 340, 347 (D.C. Cir. 2018) ("The use of the definite article 'the' * * * suggests a narrow reading."). The Commission also points to contemporaneous understandings of "public switched network" by the Commission and courts suggesting that it was commonly understood to refer to the "public switched telephone network." *See 2018 Order* ¶ 75. It singles out Commission precedent going back to 1981, *see id*. at n.276, as well as cases from this circuit, referring to "public switched network" and "public switched telephone network" seemingly interchangeably, *see id*. at n.279. It was against this background that Congress added the phrase "the public switched network" to Title III in 1993. Although mobile broadband was not yet in widespread use, these textual points and identification of contemporaneous usage and meaning lend support to the Commission's gloss of that term to mean a "singular network that 'must still be interconnected with the local exchange or interexchange switched network as it evolves.'" *Id*. ¶ 76 (quoting *Wireless Broadband Order*, 22 FCC Rcd. at 5918 ¶ 45).

In parrying the *USTA* petitioners' claims, we addressed two other uses of "public switched network" in the United States Code. Pointing to 18 U.S.C. § 1039(h)(4)'s express use of "public switched telephone network," *USTA*, 825 F.3d at 717, we found that use of this phrase contradicted petitioners' idea that Congress had intended to assign a more "restrictive meaning" to "public switched network" in Section 332. But the language occurs in Title 18 of the United States Code (devoted to the rather different subject of criminal law), and was enacted in 2007, two features rendering it insufficient as a basis to compel either the narrow reading of Congress's 1993 addition to Title 47 advanced by the *USTA* petitioners, or the broad one advanced by the current Petitioners. Further, despite

some language in the 2018 Order to the effect that "Congress intended 'public switched network' to mean a single, integrated network" that was not "meant to encompass multiple networks whose users cannot necessarily communicate or receive communications across networks," *2018 Order* ¶ 76, the Commission here did not suppose that its reading was required. Rather it said simply that that reading was "the best reading of the Act," *id*. ¶ 74, "more consistent with the text of section 332(d)(2)," *id*. ¶ 76, and "better reflects Congressional intent," *id*. Section 1039(h)(4) at most helped the *USTA* court find that the petitioners in that case failed to carry their burden of showing that the Title II Order violated the unambiguous meaning of "public switched network." The Commission's burden *here* was only to show the reasonableness of its interpretation. It did so, and without running afoul of the doctrine that we must remand a decision when the agency rests its result on a mistaken notion that it is compelled by statute. *See, e.g.*, *Prill v. NLRB*, 755 F.2d 941, 947–948 (D.C. Cir. 1985).

Similarly in *USTA* we rejected a claim that 47 U.S.C. § 1422(b)(1)(ii)'s use of the term "public switched network"—in a context pretty clearly meaning only the telephone network—meant that the Commission was *required* to so limit its definition for purposes of Section 332. We responded by pointing out that Congress was merely using the term in the sense established by the Commission's then longstanding definition (including "telephone"); accordingly the section could not have reasonably been thought "to divest the Commission of the definitional authority" expressly granted in Section 332. *USTA*, 825 F.3d at 718. In short, we simply refused to regard the provision as inflicting an implied constraint on the Commission's definitional authority. *Id*. Just so here, as well.

Next, Petitioners stress the need for Commission policy to keep pace with technological innovation. They in essence reiterate *USTA*'s "agree[ment] with the Commission that, in granting the Commission general definitional authority, Congress 'expected the notion [of the public switched network] to evolve and therefore charged the Commission with the continuing obligation to define it.'" *USTA*, 825 F.3d at 718 (second alteration in original) (quoting *Title II Order* ¶ 396). But, given the ambiguity in the statutory text, the manner in which the Commission chooses to carry out that "continuing obligation" is naturally and permissibly driven by its underlying policy judgments (subject of course to the possibility of technological changes so substantial and material that they render the policy judgment irrational, which the Commission reasonably concluded were not shown here). Noting that the Title II Order expressly invoked *its* policy reasons for broadening the concept of public switched network, *2018 Order* ¶ 78 (citing *Title II Order* ¶ 399), the Commission similarly invoked its policy choices to restore the agency's previous view, *id*.; *see also id*. ¶ 82.

The Commission also reasoned that it wished to harmonize its definition of "public switched network" with that of an "interconnected service." *See 2018 Order* ¶ 77. Because it restored the word "all" to the definition of "interconnected service" (as discussed shortly), it had good grounds to omit "public IP address" from "public switched network." The proliferation of "smart" devices with IP addresses, such as "servers, thermostats, washing machines, and scores of other devices in the Internet of Things," Verizon Comments at 48, J.A. 1968; *see also* ISPs' Br. 18, 21–22, threatened such a definition with a new complication. If those devices were part of the public switched network, it might yield the dubious upshot that *mobile voice* would no longer be a commercial mobile service because its subscribers could *not* interconnect

with "all" endpoints on the network, "such as IP-enabled televisions, washing machines, and thermostats, and other smart devices" incapable of voice communications. *2018 Order* ¶ 76 n.284. Hence a restoration of "all" in the definition of "interconnected service," coupled with an important technological development, gave added reason to restore the agency's prior view of the "public switched network."

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." *See* Mozilla Br. 75–79. 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 prejudge how other services—such as "interconnected VoIP"—should be classified. *Wireless Broadband Order*, 22 FCC Rcd. at 5918 ¶ 46; *cf. American Council on Educ. v. FCC*, 451 F.3d 226, 227–229, 228 n.1 (D.C. Cir. 2006) (taking for granted that broadband and VoIP are distinct services in upholding a Commission decision).

Petitioners by contrast contend, reprising the Title II Order, that mobile broadband service meets the above definition of "interconnected service" by virtue of functionalities afforded by VoIP. VoIP applications—like Apple FaceTime, Google Voice, and Skype—are now ubiquitous and easy to use. "For most users, the only operational difference between communicating with all other users, including all NANP endpoints, through a mobile voice call versus VoIP is which icon they press." Mozilla Br. 77. This holds true, Petitioners say, whether applications are preinstalled on mobile devices or downloaded by users. Some carriers themselves offer preinstalled Wi-Fi calling and Voice-over-LTE capabilities that permit users to make voice calls to NANP numbers via broadband without needing any additional applications. *See* OTI New America Reply at 56–59, J.A. 2791–2794; *see also* Mozilla Br. 76–77. As Petitioners see it, VoIP functionalities have become part and parcel of mobile broadband service *itself* and give subscribers "capabilit[ies]" that make mobile broadband an "interconnected service."

Some commenters frame the issue as a claim that technological change demands persistence in the choice of the Title II Order. Whereas "[t]he Commission's findings in the

2007 *Wireless Broadband Ruling* were reasonable," they are so no longer, given "the increasing convergence of mobile service offerings (mobile carriers market 'data' packages, not separate voice calling and broadband products) and of mobile networks * * * ." OTI New America Reply at 55, J.A. 2790; *see Title II Order* ¶ 401. In part for that reason Petitioners say, quoting *USTA*, that the distinction between "(i) mobile broadband alone enabling a connection, and (ii) mobile broadband enabling a connection through use of an adjunct application such as VoIP" is "elusive," *USTA*, 825 F.3d at 721, and, therefore, they claim, no longer permissible, Mozilla Br. 77.

We do not see it Petitioners' way. 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."

First, Petitioners yet again overread *USTA*. There we spoke of an "elusive" line in making the simple point that "[n]othing in the statute * * * compels the Commission to draw" that line. *USTA*, 825 F.3d at 721. That proposition is quite consistent with the proposition that nothing in the statutes *bars* the Commission from adopting the distinction—many legal distinctions are, after all, rather elusive. We fail to see our language in *USTA* as foreclosing the Commission's current view of what is part of mobile broadband service.

Second, as alluded to earlier, the agency previously drew this "elusive" distinction at least since 2007, interrupted of course by the Title II Order, even while it fully and expressly recognized the availability and significance of VoIP, as it said in the Wireless Broadband Order:

> Mobile wireless broadband Internet access service in and of itself does not provide this capability to communicate with all users of the public switched

> network. For example, mobile wireless broadband Internet access services do not use the North American Numbering Plan to access the Internet, which limits subscribers' ability to communicate to or receive communications from *all* users in the public switched network. Instead, users of a mobile wireless broadband Internet access service need to rely on another service or application, such as certain voice over Internet Protocol (VoIP) services that rely in part on the underlying Internet access service, to make calls to, and receive calls from, "all other users on the public switched network." Therefore, mobile wireless broadband Internet access service itself is not an "interconnected service" as the Commission has defined the term in the context of section 332.

Wireless Broadband Order, 22 FCC Rcd. at 5917–5918 ¶ 45; *see also 2018 Order* ¶ 81 n.300; *Title II Order* ¶ 400 & n.1167 (quoting language from the above and acknowledging the Commission's previous conclusion).

Third, technological advances since the 2007 Wireless Broadband Order do not invalidate the Commission's way of drawing the line between services. Of course technological change may sometimes require regulatory reclassification. But it is not clear why the changes identified by commenters are an example of such a requirement, as we have noted above. The *proliferation* of VoIP and *prevalence* of its use are orthogonal to the Commission's point about the *relationship* between mobile broadband and VoIP. Whether VoIP applications are used by many users or few, and whether they are preinstalled or acquired on an ad hoc basis, the question is whether VoIP functionalities are part of the service at issue here—mobile broadband service—or constitute other services that mobile broadband allows users to access. Similarly, ease of

interoperability is irrelevant to the Commission's way of framing whether there are one or two services involved in facilitating a call, no matter how seamless the toggling may be from a user's standpoint. Although a user's ability to move easily between making mobile voice calls and VoIP calls (or to toggle automatically between mobile voice and VoIP on a single call) may, as the Title II Order had put it, have "*blurred the distinction between services* using NANP numbers and services using public IP addresses," *Title II Order* ¶ 401 (emphasis added), blurring is not erasing. The Commission observes that "even if providers are increasingly offering voice service and mobile broadband Internet access service together, this does not support classifying and regulating the latter in the same way as the former." *2018 Order* ¶ 81 n.302. Similarly, the Commission comments that there is nothing odd about subjecting carriers offering "multiple services of mixed classification" to regulation on a service-by-service basis, and thus, for example, being "regulated as common carriers to the extent they offer services that are subject to Title II regulation." *Id*. (citing 47 U.S.C. § 153(51)). (The Commission declined to determine whether Wi-Fi calling and Voice-over-LTE could qualify as "interconnected services" because, on the same logic as above, it treats them as distinct services "subject to separate classification determinations." *Id*.)

Indeed, the 2018 Order recognized "the evolution of mobile network technologies that have blurred the [physical] lines between circuit switched and packet switched networks," and agreed with commenters arguing that the "public switched network should *not* be defined in a static way" (emphasis added) and should account for "continuous[] grow[th] and chang[e]." *2018 Order* ¶ 78 n.290. But it believed that this flexibility must be constrained by fidelity to what it viewed as the best reading of the statute, so that "the public switched network remains a single integrated network incorporating the

traditional local and interexchange telephone networks and enabling users to send or receive messages to or from all other users." *Id*.

Fourth, no precise conceptual framework dictated to either the current Commission or the one that issued the Title II Order how it should parse the relationship between mobile broadband and VoIP. None of the parties identifies (and we have not found) either a set of regulatory definitions purporting to draw lines between "applications" and "services," or a set of generally accepted linguistic practices drawing such a line or generally governing when the capability of apps that are usable with a service should be taken to belong to the "capabilities" of the service. As a matter of ordinary language there surely is no problem with the Commission's take. If someone tells a friend, "I just got a great new tablet with mobile broadband," it would hardly be a solecism for the friend to reply, "Great—does your service let me reach you from my landline?" Of course the new tablet owner might reply, "Not now—but it could if I set up a Google Voice number," but that only shows the linguistic ambiguity. Given the absence of any norms pressing in Petitioners' favor, we cannot condemn as impermissible the Commission's choice to draw the line in a way that averted what it reasonably viewed as statutory self-contradiction, echoing the Title II Order's reasoning in Paragraph 403, which was accepted by *USTA*, *see* 825 F.3d at 724.

Fifth, attempts to catch the Commission in self-contradiction are unavailing. Commenters and Petitioners say that if the Commission's theory were properly applied, *mobile voice* would turn out not to be an "interconnected service," an untenable outcome. Commenters invoke the truth that the Commission recognizes a service as having a "capability" even though exercise of that capability requires customer premises

equipment ("CPE") even for ordinary landline use. *See* OTI New America Comments at 56–57, J.A. 2791–2792; Mozilla Reply Br. 36–37. And just as customers need mobile devices packaged with software to make use of a mobile voice service, they need VoIP to place voice calls over broadband. Since the former does not disqualify mobile voice from being a commercial mobile service (as everyone agrees), the latter, commenters and Petitioners say, should not disqualify mobile broadband from the same classification. *See* Mozilla Br. 75–76; *see also* OTI New America Comments at 56, J.A. 2791 ("[A] mobile voice subscriber cannot 'speak' to a fax machine, or to a pager, because each of these common carrier services, despite being 'interconnected' through the 'public switched network,' obviously requires certain CPE (or applications) to meaningfully interconnect and communicate. VoIP and Wi-Fi calling to NANP endpoints over the internet is no different, whether the application is pre-loaded by the mobile BIAS provider (e.g., T-Mobile Wi-Fi Calling, Google Voice) or downloaded via a pre-loaded app store gateway.").

But the Commission found the analogy "inapt." *2018 Order* ¶ 80 n.298. (Hence Mozilla is mistaken in saying that the Commission did not address the matter. *See* Mozilla Br. 76). The difference, the Commission says, is that—even though users need to acquire equipment and software separately for mobile voice—"the function of interconnection is provided by the purchased mobile service itself." *2018 Order* ¶ 80 n.298. With VoIP, by contrast, the add-on application—and not the broadband service—supplies the interconnection functionality. *Id*. And precisely because (as noted above) no regulatory, conceptual, or linguistic strictures force the Commission's hand, its analysis here is reasonable.

Finally, even if we were to accept Petitioners' argument that the capability of mobile broadband service should be

conceived as embracing the capabilities both of that service and of VoIP, the choice of mobile broadband subscribers *not* to obtain VoIP capability would stand in the way of mobile broadband's satisfying the Commission's restored definition of "interconnected service": To repeat, such service must give 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). Petitioners and commenters in support of their position never dispute the existence of many such non-VoIP-using mobile broadband subscribers, though their number is unknown.

The gap in Petitioners' theory is shown most clearly in the obvious inability of a would-be caller from a NANP number who seeks to reach a person with mobile broadband but no form of VoIP (or mobile voice service). Suppose we agreed with Petitioners that mobile broadband gives the call's intended recipient the "capability" of receiving NANP-originated calls by, for example, obtaining a NANP number through Google Voice or Skype or like services. By this they really mean that it gives him the capability of acquiring that capability ("capability^2"?). But the availability of that option for the intended *recipient* does not give the would-be *caller* even the capability of obtaining the capability of reaching his intended call recipient.

And a party with mobile broadband but *without* some form of VoIP capability cannot either "communicate to or receive communication from *all* other users on the public switched network," 47 C.F.R. § 20.3 (emphasis added), even though she has the capability of acquiring that capability. But "[u]sers who cannot communicate with each other are simply not 'interconnected' in any plausible sense." ISPs' Br. 19.

In sum, we find that the Commission's way of distinguishing among services and analyzing their regulatory implications meets *Fox Television*'s reasonableness requirement, 556 U.S. at 514–516, and falls within the bounds of agency discretion under *Chevron*.

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. 47 U.S.C. § 332(d)(3). We are unconvinced. We find that the Commission reasonably readopted its test for functionally equivalent services that it had used from 1994 until 2015 and permissibly found that mobile broadband does not qualify as a service functionally equivalent to mobile voice.

To begin with, Petitioners do not directly challenge the Commission's return to its pre-Title II Order test for functional equivalence laid out in the Second CMRS Report and Order. *See 2018 Order* ¶¶ 83–84; *see also Second CMRS Report and Order*, 9 FCC Rcd. at 1447–1448 ¶ 80; *cf.* ISPs' Br. 22 n.9. That approach entails looking to "a variety of factors" to determine whether "demand for" the allegedly functionally equivalent service is "a close substitute" for a given commercial mobile service, including:

> [C]onsumer demand for the service to determine whether the service is closely substitutable * * *; whether changes in price for the service under examination, or for the comparable * * * service[,] would prompt customers to change from one service to the other; and market research information

> identifying the targeted market for the service under review.

Second CMRS Report and Order, 9 FCC Rcd. at 1519 § 20.9(a)(13)(ii)(B); *see also id*. at 1447–1448 ¶ 80. This focus on cross-elasticity of demand differs significantly from the new test adopted in the Title II Order, which focused entirely on whether a service is "widely available" and "offers mobile subscribers the capability to send and receive communications on their mobile device to and from the public." *Title II Order* ¶ 404.

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." 9 FCC Rcd. at 1447 ¶ 78 (emphasis added). The 2018 Order quite properly rested on this section of the Second CMRS Report and Order. *2018 Order* ¶ 84 & n.312.

Applying the restored CMRS test, the Commission appropriately looked to substitutability of the services on offer. It reasoned that mobile voice and mobile broadband "have different service characteristics and intended uses and are not closely substitutable for each other * * *." *2018 Order* ¶ 85. Consumers purchase mobile broadband to "access the Internet, on-line video, games, search engines, websites, and various other applications." *Id*. By contrast, consumers "purchase mobile voice service solely to make calls to other users using NANP numbers [presumably referring primarily to users reachable via the public switched telephone network]." *Id*. Thus the Commission plausibly places its emphasis on the distinct purposes and capabilities of the services taken as a whole. In virtue of these differences, the two are not "closely substitutable in the eyes of consumers." *Id*. ¶ 84; *cf*. *Second CMRS Report and Order*, 9 FCC Rcd. at 1447–1448 ¶ 80 (asking whether a service is a "close substitute").

In support of its finding of non-substitutability, the Commission points to divergent price points between the two services. It offers examples showing a substantial price gap—with up to a six-fold jump from $15 to $90 per line—between unlimited voice/text plans and unlimited mobile broadband plans. *2018 Order* ¶ 85; *see id*. at nn.317 & 318. It ties this down to the CMRS test by making the seemingly indisputable point that "[n]othing in the record suggests that changing the price for one service by a small but significant percentage would prompt a significant percentage of customers to move to the other service." *Id*. ¶ 85. Petitioners do not contest that finding, which is hardly surprising, given the distinct purposes and range of options in mobile voice and mobile broadband, notwithstanding their interoperability.

Instead Petitioners respond with an interesting but seemingly unhelpful point: "Today each of the four national

[mobile] carriers exclusively sell smartphone plans that bundle voice, texting and internet access as applications * * * ." OTI New America Comments at 97–98, J.A. 1695–1696 (quoted at Mozilla Br. 81). The Commission concedes that the voice-and-text-only plans it describes are offered by "small mobile carriers." Commission Br. 56 n.12. But Petitioners' approach suffers a worse defect: To contest the Commission's finding that the two services are not close substitutes (and therefore not very direct *competitors*) it offers evidence that they are very good *complements*. That seems a rather deft way of changing the subject. Though national plans may bundle voice and data, the Commission aptly says that this "does not undermine [its] conclusion that consumers do not regard [the services] as fungible." *Id*.; *cf.* ISPs' Br. 22 ("[C]onsumers generally subscribe to both services * * * because they employ them for different purposes.").

Petitioners appear to rely on a competing test for functional equivalence resembling the Title II Order's approach. As Petitioners see it, the fact that mobile voice and mobile broadband both allow users to carry out some of the same tasks—most importantly, placing voice calls to NANP numbers (to the extent allowed by mobile broadband users' adoption of VoIP)—suffices to compel their treatment as functionally equivalent services. Mozilla contends that mobile broadband "provides *all* the functionality of mobile voice, allowing subscribers to call anyone a mobile voice subscriber could," and is therefore a functionally equivalent service. Mozilla Br. 80.

This argument fails on two counts. It completely disregards the Commission's solid grounds for returning to the pre-Title II Order focus on substitutability and cross-elasticity—a return that, as we noted above, Petitioners do not explicitly challenge. That focus made the statute's "functional

equivalent" provision serve the sound policy objective of bringing services in close competition with each other under the same regulatory umbrella. Second, Petitioners' alternative test suffers the same flaw (from the Commission's perspective) as their effort to treat mobile broadband *and* VoIP as a single service, an effort the Commission was under no obligation to countenance.

In sum, even though Petitioners' reading of a "functional equivalen[ce]" in Section 332(d)(3) is not foreclosed by the statute, the agency's interpretation of that term, and its application to mobile broadband, are reasonable and merit *Chevron* deference.

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. Pursuant to Section 706(a), the FCC "shall encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans * * * by utilizing * * * price cap regulation, regulatory forbearance, measures that promote competition in the local telecommunications market, or other regulating methods that remove barriers to infrastructure investment." 47 U.S.C. § 1302(a). Furthermore, Section 706(b) states that the agency "shall take immediate action" if this goal is not being met "in a timely fashion." *Id.* § 1302(b). The Commission interpreted these provisions as "exhorting the Commission to exercise market-based or deregulatory authority granted under other statutory provisions, particularly the Communications Act" not as "an independent grant of regulatory authority to give those provisions meaning." *2018 Order* ¶ 270. Despite

Petitioners' contentions, we find that this interpretation of Sections 706(a) and (b) is lawful.

As with our prior analysis of the Commission's classification determinations, we evaluate its statutory interpretation decisions concerning Section 706 authority by applying the two-step analysis of *Chevron*. *See* 467 U.S. at 842–843.

In *Verizon v. FCC*, we noted that the language of Section 706 is ambiguous. *See* 740 F.3d 623, 635-636 (D.C. Cir. 2014) (citing *Chevron*, 467 U.S. at 842–843); *see also id.* at 641 ("[A]s with section 706(a), it is unclear whether section 706(b) * * * vested the Commission with authority to remove [] barriers to infrastructure investment and promote competition."). 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. *Id.* at 641. 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.

We first dispense with the Commission's contention that Petitioners Mozilla and Internet Association ("IA") do not have standing to assert this challenge because they do not suffer injury. The Commission notes that Petitioners fail to identify any injuries that flow from the transparency rule itself but rather observe that the rule derivatively supports other rules that they find injurious. Without alleging harm specific to the transparency rule, the Commission contends, Petitioners lack standing. This understanding of injury is flawed. Petitioners allege concrete injury from the Commission's Order repealing Internet conduct rules. When a party alleges concrete injury from promulgation of an agency rule, it has standing to challenge essential components of that rule, invoked by the agency to justify the ultimate action, even if they are not directly linked to Petitioners' injuries; if Petitioners' objections carry the day, the rule will be struck down and their injury redressed. *See Sierra Club v. FERC*, 867 F.3d 1357, 1366–1367 (D.C. Cir. 2017); *see also WildEarth Guardians v. Jewell*, 738 F.3d 298, 304–308 (D.C. Cir. 2013). Because it is

undisputed that the transparency rule is an essential component of the 2018 Order, Petitioners have standing to object to any deficiency with the transparency rule. *See Sierra Club*, 867 F.3d at 1366–1367. The deficiency need not be tied to the Petitioners' specific injuries. Accordingly, we find that Petitioners suffer injury for the purpose of establishing standing.

Nonetheless, the 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 Commission, however, interpreted the statute to require a rulemaking based on authority other than section 257 itself only for rules intended to eliminate market barriers rather than rules meant to identify such barriers." Commission Br. 100. 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).

While Petitioners correctly note that Section 257(c) was removed from the Communications Act before the 2018 Order became effective, *see* RAY BAUM'S Act of 2018, Pub. L. 115-141, § 402(f), 132 Stat. 1089 (2018), it was not altered in any material respect for purposes of the Commission's authority in this regard. The 2018 legislation that amended the Act introduced a biennial reporting requirement quite similar to the triennial reporting requirement contained in the former Section 257(c). *See* Pub. L. No. 115-141, Div. P, §§ 401, 402(f), 132 Stat. at 1087-1089 (codifying a reporting requirement at 47 U.S.C. § 163). Indeed, Congress emphasized that "[n]othing in this title or the amendments made by this title shall be construed to expand or contract the authority of the Commission." Pub. L. No. 115-141, Div. P, § 403, 132 Stat. at 1090.

We also reject Petitioners' contention that they did not have adequate notice of the statutory authority upon which the Commission relied in imposing the transparency rule. This Court has previously recognized Section 257 as a possible source of authority for such rules. *See, e.g.*, *Comcast Corp. v. FCC*, 600 F.3d 642, 659 (D.C. Cir. 2010) ("We readily accept that certain assertions of Commission authority could be reasonably ancillary to the Commission's statutory responsibility to issue a report to Congress. For example, the Commission might impose disclosure requirements on regulated entities in order to gather data needed for such a

report." (quotations omitted)); *see also Verizon*, 740 F.3d at 668 n.9 (Silberman, J., concurring in part and dissenting in part). In fact, in response to the Notice of Proposed Rulemaking's ("NPRM's") explicit solicitation of comment on its legal authority to adopt rules if the Commission reclassified broadband as an information service, several commenters identified Section 257 as a possible source of authority for a transparency rule. *See 2018 Order* ¶ 232 n.843; *see also* NPRM ¶ 103 ("[W]e seek comment on *any* other sources of independent legal authority." (emphasis added)). Thus, we find Petitioners' notice argument to be without merit.

Intervenor Digital Justice Foundation argues that while the Commission has authority to maintain a transparency rule, it should have retained aspects of the rule contained in a 2010 Order issued by the Commission. *See Preserving the Open Internet*, 25 FCC Rcd. 17905 (2010) ("*2010 Order*"). At the outset, we reject the Commission's assertion that this argument is not properly before us. Digital Justice has simply raised a new argument in support of claims the Petitioners have presented. The argument is thus a far cry from the sort of intervenor's claim with "absolutely no substantive connection with the issues raised by the petition for review," which we have rejected in the past. *See Synovus Fin. Corp. v. Board of Governors of Fed. Reserve Sys.*, 952 F.2d 426, 434 (D.C. Cir. 1991). We also find no merit in the Commission's argument that Digital Justice was required to seek reconsideration before raising this garden-variety arbitrary-and-capricious challenge. A petition for reconsideration is required for "only those issues upon which the Commission has been afforded no opportunity to pass." *AT&T Corp. v. FCC*, 394 F.3d 933, 938 n.1 (D.C. Cir. 2005) (internal quotation marks omitted). That rule always allows courts to consider whether the Commission "relied on faulty logic," *id.*, because "[t]he Commission necessarily had an opportunity to pass upon the validity of the

rationale that it actually put forth," *MCI Telecomm. Corp. v. FCC*, 10 F.3d 842, 845 (D.C. Cir. 1993).

Turning to the merits, Digital Justice charges that it was arbitrary and capricious for the Commission to eliminate aspects of the former transparency rule without considering the impact on entrepreneurs and small businesses — as identified in Section 257(a)—or providing a reasoned explanation for modifying the rule. We disagree. The Commission explained that the "additional obligations [of the former transparency rule] [did] not benefit consumers, entrepreneurs, or the Commission sufficiently to outweigh the burdens imposed on [broadband providers]." *See 2018 Order* ¶ 210. We are also unpersuaded by Digital Justice's claim that the Commission needed to analyze the interest of entrepreneurs and other small businesses in the specific context of repealing portions of the transparency rule. Section 257(a) simply requires the FCC to consider "market entry barriers for entrepreneurs and other small businesses." 47 U.S.C. §257(a). The disclosure requirements in the transparency rule are in service of this obligation. The Commission found that the elements of the transparency rule in the 2018 Order will "keep entrepreneurs and other small businesses effectively informed of [broadband provider] practices so that they can develop, market, and maintain Internet offerings." *See 2018 Order* ¶ 218. In fact, the Order takes care to describe the specific requirements of the rule to "ensure that consumers, entrepreneurs, and other small businesses receive sufficient information to make [the] rule effective." *Id.*; *see also id.* ¶¶218–223. Digital Justice's challenges cannot prevail under our particularly deferential arbitrary-and-capricious review.

In sum, we uphold the transparency rule as authorized by 47 U.S.C. § 257.

V. Arbitrary and Capricious Challenges

The Commission claims that we can uphold its entire rulemaking on the weight of its statutory interpretation alone. *See* Commission Br. 58 (expressing its view that its legal interpretation "alone suffices to justify the repeal"). In the Commission's view, the reasonableness of its interpretation necessarily insulates the 2018 Order from arbitrary and capricious challenge. *See id.*

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. The former asks whether the agency's interpretation "is based on a permissible construction of the statute." *Chevron*, 467 U.S. at 843. And the latter asks whether the agency "examine[d] the relevant data and articulate[d] a satisfactory explanation for its action including a rational connection between the facts found and the choice made," and "whether the decision was based on a consideration of the relevant factors and whether there has been a clear error of judgment." *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (internal quotations marks omitted). Nevertheless, "the Venn diagram of the two inquiries is not a circle." *Humane Soc'y of United States v. Zinke*, 865 F.3d 585, 605 (D.C. Cir. 2017). Each 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, *see National Lifeline Ass'n v. FCC*, 921 F.3d 1102, 1111 (D.C. Cir. 2019), and so reject Petitioners' objections.

As part of its justification for "light-touch" regulation of the Internet ecosystem, the Commission made a variety of arguments about optimal, and suboptimal, conditions for broadband investment and innovation. It relied on, among other things, (1) prior agency positions, which have "long recognized that regulatory burdens and uncertainty * * * can deter investment by regulated entities," *2018 Order* ¶ 88, backed up by economic theory in general, *id*. ¶¶ 89, 93; (2) a finding that "the balance of the evidence indicates that Title II discourages investment by ISPs," *id*. ¶ 93, supported by studies evaluating ISP investment before and after the Title II Order, *id*. ¶¶ 89–98; (3) the disincentive to investment arising from

regulatory uncertainty about the substance and potential reach of Title II regulation, *id*. ¶¶ 99–102; (4) effects on small ISPs and rural communities where firms are more likely to take the risks of offering much-needed services in a more predictable and less onerous regulatory climate, *id*. ¶¶ 103–106; and (5) the absence of evidence of negative effects on edge investment, *id*. ¶¶ 107–108. This diverse array of theses led the Commission to conclude that "Title II classification likely has resulted, and will result, in considerable social cost, in terms of forgone investment and innovation," without "discernable incremental benefit relative to Title I classification." *Id*. ¶ 87.

We reiterate that our posture in arbitrary and capricious review is deferential. To withstand scrutiny, "the agency must examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made." *State Farm*, 463 U.S. at 43 (internal quotation marks omitted). Where, as here, the agency shifts course, "it suffices that the new policy is permissible under the statute, that there are good reasons for it, and that the agency *believes* it to be better, which the conscious change of course adequately indicates." *Fox Television*, 556 U.S. at 515. Especially apt here is an admonition we have long made: "Predictions regarding the actions of regulated entities are precisely the type of policy judgments that courts routinely and quite correctly leave to administrative agencies." *Public Citizen, Inc. v. National Highway Traffic Safety Admin.*, 374 F.3d 1251, 1260–1261 (D.C. Cir. 2004) (quoting *Public Utils. Comm'n v. FERC*, 24 F.3d 275, 281 (D.C. Cir. 1994)).

Mozilla and Intervenors IA especially attack a study by Hal J. Singer, which had "concluded that ISP investment by major ISPs fell by 5.6 percent between 2014 and 2016." *2018 Order* ¶ 91. They allege "serious methodological defects" with

the study, Mozilla Br. 69, and say that the Commission should have placed greater stock in "aggregate investment totals as actually reported by companies to investors," *id*.—specifically, capital expenditure figures of publicly traded broadband providers in 2013–2016 as summarized by Free Press in its comments to the Commission, *see* J.A. 860. And they unfavorably contrast the reliability of Singer's numbers with those cited by Free Press. They note the Commission's acknowledgement that "Singer's calculations do not control for some factors that influence investment, such as the 'lumpiness' of capital investment and technological change," *2018 Order* ¶ 91 n.339; *see* Mozilla Br. 69; IA Intervenors' Br. ("IA Br.") 22–23, an acknowledgement that might well be taken to reflect quite proper Commission caution about the empirical issues.

In our view the Commission's reliance on, and analysis of, the Singer study are reasonable. First, it is but one of numerous studies and trends invoked by the Commission that reached similar conclusions—about which Petitioners say relatively little or nothing specific. These include (1) a study finding that "ISP capital investment increased each year from the end of the recession in 2009 until 2014, when it peaked," *2018 Order* ¶ 90 & n.335; *see* IA Br. 20–21 (questioning trends in these data); (2) another reporting that wireless capital investment had slowed, with a "precipitous decline in 2016," *id*. ¶ 90 n.337; and (3) an article, Thomas W. Hazlett & Joshua D. Wright, *The Effect of Regulation on Broadband Markets: Evaluating the Empirical Evidence in the FCC's 2015 'Open Internet' Order*, 50 Rev. Indus. Org. 487 (2017), uncontroverted by Petitioners, on which the Commission drew extensively, *see 2018 Order* ¶¶ 94 & n.349, 96 & n.358, 98 & n.362, 107, 148 & nn.535–536. This study relied in part on a "natural experiment" derived from Commission policy changes, showing a "statistically significant upward shift in DSL [Digital

Subscriber Line]" investment after the FCC reclassified DSL service as an "information service" in 2005. *Id*. ¶ 94.

Mozilla's effort to paint a contrasting picture of the Singer and Free Press studies ("Singer—bad; Free Press—good") encounters multiple obstacles (undiscussed by Petitioners). Mozilla does not address shortcomings of the Free Press figures, pinpointed by the agency, including for example its failure to exclude investment abroad, which the Singer study had accounted for. *2018 Order* ¶ 91; *cf.* IA Br. 22 (acknowledging this point). Most important, Mozilla and IA entirely ignore an analysis that puts the two studies on an apples-to-apples basis and finds agreement between them. That analysis "adjusted the Free Press and Singer numbers so that they [1] covered the same ISPs, [2] spanned the same time period, and [3] subtracted investments unaffected by the regulatory change." *2018 Order* ¶ 92 (numbering added). After controlling for these three factors, the assessment "found that *both sets of numbers* demonstrate that ISP investment fell by about 3 percent in 2015 and by 2 percent in 2016." *Id*. (emphasis added). The comparison thus indicates a convergence between the two sets of figures—a convergence close to the original Singer findings. While that assessment may itself be flawed, Petitioners and Intervenors ignore it altogether. We thus conclude that the Commission's reliance on the Singer study—given its apparent match-up with the Free Press data, and as but a part of the agency's analysis—is not unreasonable.

Mozilla also reframes its championing of the Free Press data by asserting the superiority of investment "results" attained by "[i]ndividual BIAS providers[]" (citing only the Free Press data), over "aggregate numbers," which may be "easily[] skewed." Mozilla Br. 70; *see* IA Br. 21. Whatever the force of the general theory, it seems immaterial as a basis

to prefer Free Press's calculations in light of the apparent (and uncontested by Petitioners) harmony of the Free Press and Singer data.

The broader point here is that the Commission was clear-eyed in assigning quite modest probative value to studies attempting to draw links between the Title II Order and broadband investment, so that there is less daylight between the Commission and Petitioners than the latter seem to think. It states that "reclassification * * * is *likely* to increase ISP investment and output." *2018 Order* ¶ 98 (emphasis added). It also notes a separate calculation by the Free State Foundation that yielded findings similar to Singer's based on "capital expenditure data for 16 of the largest ISPs." *Id*. ¶ 92. But the Commission observes that, while "suggestive," they are at most confirmatory of "other evidence in the record that indicates that Title II affected broadband investment." *Id*. So here too we find IA's criticism of Free State's calculation, *see* IA Br. 23–24, to a large extent blunted by the Commission's having already discounted it. To be sure, the IA asserts a more intense level of skepticism, indeed an Olympian level, calling "attempts to identify and quantify direct causal impacts of the [Title II Order]" an "essentially * * * pointless exercise." IA Br. 18 (citation omitted). The takeaway here is *both* that Petitioners' skepticism is echoed in the 2018 Order and that some commenters seem to set the bar so high that no empirical grounds relating to the Title II Order's effects on ISP investment could support (or refute) the Commission's policy.

The parties spar at length over a paper by George Ford at the Phoenix Center, which had shown that then-FCC Chairman Julius Genachowski's "surprise[]" announcement in 2010 of a "framework for reclassifying broadband under Title II * * * was associated with a $30 billion-$40 billion annual decline in investment in" the United States Bureau of Economic

Analysis['s] 'broadcasting and telecommunications' category between 2011 and 2015." *2018 Order* ¶ 95 & n.353. Again we note that the Commission was fairly modest in its reliance on the study, observing that because it had used data "cover[ing] the entire broadcasting and telecommunications industries," it could only be reliably adduced as evidence of the *directionality* of broadband investment, not "the absolute size of the change" attributable to the Title II Order. *2018 Order* ¶ 95.

IA (perhaps applying the lofty standard by which it discounted *any* effort to estimate the effect of the Title II Order on investment as "essentially a pointless exercise") still regards the Commission as having placed undue weight on this result while underweighting a competing study by Christopher Hooton that it had proffered. *See* J.A. 1178–1222. The Hooton study had criticized Dr. Ford's work, *see* J.A. 1184, and elicited a reply, *see 2018 Order* ¶ 97 n.360; *see also* IA Br. 24–25; Phoenix Ctr. Amicus Br. 18–25.

The Ford-Hooton dispute seems far too sophisticated for us to credibly take sides. When intricacies of econometric modeling are in dispute, "we do not sit as a panel of referees on a professional economics journal, but as a panel of generalist judges obliged to defer to a reasonable judgment by an agency acting pursuant to congressionally delegated authority." *USTA*, 825 F.3d at 697 (quoting *City of Los Angeles v. United States Dep't of Transp.*, 165 F.3d 972, 978 (D.C. Cir. 1999)). One issue suggests the impenetrability of the matter from our perspective. The IA brief is very insistent that the Commission unfairly criticizes the Hooton study for relying "partially on forecast [data] rather than actual data," Commission Br. 83 (quoting *2018 Order* ¶ 97), while failing to complain of comparable methodologies in its own favored studies, *see* IA Br. 19; IA Reply Br. 9–11.

Maybe so, maybe not. Perhaps the methodological dispute will ultimately attract scholarly attention and be sorted out persuasively on one side or the other. It seems likely that many variables would be relevant in assessing when reliance on forecasts would be justifiable, and—in cases where it was not—assessing whether the reliance was of any real consequence. But we are not the needed scholars, and will not pretend we understand more than we do. Perhaps Hooton wins on points. That is an insufficient ground for us to call the Commission's finding unreasonable.

Next Mozilla quotes remarks by two chief executive officers of ISPs that it believes "offer[] much more probative evidence on the effect of the [*Title II*] *Order* on investment decisions." Mozilla Br. 70; *see* IA Br. 21–22. But those statements seem to match exactly one of the grounds on which the Commission found such statements generally irrelevant to the investment-effect issue, namely that the executives were saying only that their firms' *practices* would not be affected because they were not engaged in the conduct prohibited by the new rules. *See 2018 Order* ¶ 102 & nn.384–385; R Street Institute Reply at 8, WC Dkt. No. 17-108 (Aug. 30, 2017); *see also* Commission Br. 83. Petitioners do not address these points. *See* Mozilla Br. 69–70; IA Br. 22; *see also* Mozilla Reply Br. (failing to address reduced investment).

Indeed, one of the CEOs whose December 2015 remarks Mozilla highlights, Randall Stephenson of AT&T, Mozilla Br. 70 (quoting J.A. 881), said in January 2017 that, while his company is an "advocate[] of net neutrality," "[t]here is no way anybody can argue" that "placing utility[-]style regulation on our mobility and internet businesses * * * is not suppressive to investment," Georgetown Ctr. for Bus. and Pub. Policy Amicus Br. 6; *see also* AT&T Comments at 54 n.91, J.A. 170, a distinction that echoes the FCC's contrast between a

commitment to "net neutrality *per se*" and "the threat of Title II regulation," *2018 Order* ¶ 95.

We now turn to IA's claims that the Commission gave short shrift to benefits for edge investment arising from the Title II Order. IA Br. 25–27. We are unconvinced. While agreeing that it is critical not to overlook effects on edge providers, the Commission found no evidence of either (1) "a correlation between edge provider investment and Title II regulation" or (2) a "causal relationship" between the Title II Order and upswings in edge investment, which would need to be demonstrated using a counterfactual analysis of the sort employed on other matters in Hazlett and Wright's paper. *2018 Order* ¶ 107. Without claiming that edge investment would have been higher absent the Title II Order, the Commission pointed to data suggesting that "the strongest growth" for certain edge providers and segments of the industry "predate[d] the *Title II Order*." *Id*. ¶ 108.

First, IA alleges a double standard as to the above: The Commission sets a high bar to show causal links between edge investment and the Title II Order while settling for less exacting standards in finding that the Title II Order likely hurt ISP investment. IA Br. 26. But we have already said that the agency drew reasonable, and appropriately qualified, conclusions on the latter issue. Second, IA says it is ironic that the Commission asks for counterfactual analysis while putting stock in the (allegedly) flawed Ford study. *Id*. Without touching on the Ford-Hooton debate, we simply note that IA is silent as to Hazlett and Wright's methodology for running counterfactual analyses, which the Commission treated as reliable—and without any equivalent as to edge providers in these proceedings. *2018 Order* ¶ 107. Third, IA says the Commission flouts *Fox Television* by ignoring the Title II Order's claim that edge innovation "depends upon low barriers

to innovation and entry," IA Br. 26–27 (quoting *Verizon*, 740 F.3d at 645 (quoting, in turn, *Title II Order* ¶ 14)). Here IA begs the question. The thrust of the 2018 Order is that edge investment will benefit on net from unburdening ISPs of "onerous utility regulation." *2018 Order* ¶ 110. The Commission argues, *inter alia*, that (1) the Title II Order failed to take a properly "holistic view of the market(s) supplied by ISPs," and that "net gains to subscribers *and edge providers*," *id*. ¶ 119 (emphasis added), are best achieved without "heavy-handed" Title II rules, *id*. ¶ 117; *see also id*. ¶¶ 120–121; (2) "smaller edge providers may benefit from tiered pricing, such as paid prioritization, as a means [both] of gaining [market] entry," *id*. ¶ 133, and "compet[ing] on a more even playing field against large edge providers," *id*. ¶ 255; (3) "ending the flat ban on paid prioritization will encourage the entry of new edge providers into the market, particularly those offering innovative forms of service differentiation and experimentation," *id*.; *see also id*. at n.921 (reasoning that "encourag[ing] differentiated services is important because some online activities require only a minimal amount of bandwidth but extremely low latency; other uses may require greater bandwidth" (quoting Ericsson Comments at 5, WC Dkt. No. 17-108 (July 17, 2017)); and (4) transparency rules, coupled with ISPs' economic incentives, can protect "Internet openness," ¶ 117; *see also id*. ¶ 142. Putting aside the merits of these claims, which we address elsewhere, we do not find that the Commission's take on edge investment at Paragraphs 107–108 of the 2018 Order is either arbitrary or in conflict with *Fox Television*.

IA also alleges that the Commission failed to grapple properly with the Title II Order's prediction of a possible short-term downturn in investment, only touching cursorily on it at Paragraph 247. *See Title II Order* ¶ 410; *see also* IA Br. 28 & n.11. But the Commission, noting "that the vague Internet

Conduct Standard [of the Title II Order] subjects providers to substantial regulatory uncertainty," *2018 Order* ¶ 247, expressed doubt that this uncertainty was "likely to be short term and [would] dissipate over time as the marketplace internalizes [the] Title II approach," *id*. (second alteration in original) (quoting *Title II Order* ¶ 410).

Finally, Petitioners appear to believe that the Commission arbitrarily downweighted a study, Robert W. Crandall, *The FCC's Net Neutrality Decision and Stock Prices*, 50 Rev. Indus. Org. 555 (2017), finding that, despite release of the Title II Order in March 2015, there had been no decline in the stock prices of BIAS providers in the first half of 2015 relative to the stock market generally. Mozilla Br. 70–71; *see 2018 Order* ¶ 93 n.346. (We note that the study relates only indirectly to the issue of investment, although both derive from market anticipations of future profit.) The agency had commented that the study "may reflect the forward-looking, predictive capabilities of market players." *2018 Order* ¶ 93 n.346. In its brief before us the Commission confirms what an ordinary reader would likely have made of that remark, namely, that the market would have factored into the stock price investors' expectations of the ultimate Commission action before it occurred. Commission Br. 84 n.23. Anticipating this reading, Petitioners see it as unreasonable, because it is tantamount to using a "crystal ball, since reclassification was not the preferred course announced by the Commission in the *2014 NPRM* [¶ 148]." Mozilla Br. 71; *see In re Protecting and Promoting the Open Internet*, 29 FCC Rcd. 5561, 5612–5613 ¶ 148 ("*2014 NPRM*").

Curiously, we have already opined on Paragraph 148 of the 2014 NPRM for the Title II Order. In *USTA* we addressed United States Telecom's claim that because the NPRM proposed to rely on Section 706 there was inadequate notice of

its ultimate use of Title II. We batted that out of the park in one sentence, citing Paragraph 148's call for comment on possible use of Title II, *USTA*, 825 F.3d at 700, a call that the Commission in fact proliferated in seven additional paragraphs bursting with minutiae about the use of Title II, *see 2014 NPRM* ¶¶ 149–155. Moreover the May 2014 NPRM made clear the Commission's plan to impose new rules on industry. *See, e.g.*, *id.* ¶ 24. ("Today, we respond directly to that remand [*Verizon*, 740 F.3d at 659] and propose to adopt enforceable rules of the road * * * to protect and promote the open Internet."). Strikingly, United States Telecom's claim of inadequate notice did not suggest that the NPRM left it in the dark *on a single rule* adopted in the Title II Order. *USTA*, 825 F.3d at 700.

We should add that the disputed Crandall article takes no explicit note of the 2014 NPRM (though its charts suggest an absence of any stock movement associated with it). *See* Crandall, *The FCC's Net Neutrality Decision and Stock Prices*, 50 Rev. Indus. Org. at 661 Figs. 1 & 2. Reading the article as finding no stock price impact from the whole course of events, however, does not ipso facto undermine the Commission's inference of a probable reduction in investment, as that reduction might reflect firms' strategies for minimizing the Title II Order's anticipated economic impact by reallocating capital to other, similarly productive, uses, thereby keeping stock prices mostly unaffected.

In sum, we stress again the Commission's recognition that the Title II Order's effect on investment was subject to honest dispute, focusing in Paragraphs 87–98 on what is "likely" to happen, repeatedly flagging shortcomings in studies it cites, and qualifying their probative force. It found modestly that "[t]he balance of the evidence in the record suggests that Title II classification has reduced ISP investment in broadband

networks." *2018 Order* ¶ 88. Further, claims about the Title II Order's effects on investment are only one element of the Commission's basis for believing that reclassification will yield positive economic effects. We are, in short, unpersuaded by Petitioners' and Intervenors' objections to the Commission's finding and their implicit claim that uncertainties associated with that finding render arbitrary the Commission's overall judgment—that there are net public policy benefits from reclassification, based not only on a likelihood of increased investment and innovation but also on the absence of any "discernable incremental benefit relative to Title I classification." *Id*. ¶ 87. This court "properly defers to policy determinations invoking the [agency's] expertise in evaluating complex market conditions." *Gas Transmission Nw. Corp. v. FERC*, 504 F.3d 1318, 1322 (D.C. Cir. 2007).

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 *Fox Television*, 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. at 515–516. 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[ed] 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*.

We are, however, troubled by the Commission's failure to grapple with the fact that, for much of the past two decades, broadband providers were subject to some degree of open Internet restrictions. For example, from the late 1990s to 2005, Title II applied to the transmission component of DSL service. *Title II Order* ¶ 313. Even after the Commission issued the 2005 Wireline Broadband Order, which classified DSL as an integrated information service and thus further removing it from Title II's ambit, the Commission announced that should it "see evidence that providers of telecommunications for Internet access or IP-enabled services are violating" the Internet Policy Statement, which reflected Chairman Michael Powell's four principles of Internet openness, it would "not hesitate to take action to address that conduct," *id.* at 14904 ¶ 96. In 2015, the Commission also claimed that "Title II has been maintained by more than 1000 rural local exchange carriers that have chosen to offer their DSL and fiber broadband services as common carrier offerings." *Title II Order* ¶ 39. The Commission's failure to acknowledge this regulatory history, however, does not provide grounds for reversal on this record

given its view that market forces combined with other enforcement mechanisms, rather than regulation, are enough to limit harmful behavior by broadband providers.

Petitioners dispute that the transparency rule, market forces, or existing antitrust and consumer protection laws can adequately protect Internet openness. The Commission's conclusion to the contrary, they argue, was arbitrary and capricious. We consider Petitioners' attack on components of the light-touch regime but are ultimately unpersuaded.

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. *2018 Order* ¶ 209. 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.*; *see also id.* ¶ 217. 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 with three arguments, none of which we find surmount the highly deferential standard of review.

First, Petitioners claim that the Commission arbitrarily accepted a lack of competition in the fixed broadband market. For example, Petitioners lament that almost half of Americans have either one or no choice for residential high-speed wireline broadband providers (download speeds of 25 Mbps and higher and upload speeds of 3 Mbps and higher). Another 45 percent have only two high-speed wireline options. Despite this information, the Commission concludes that competition is "widespread." *2018 Order* ¶ 125.

As part of its overall argument, the Commission suggests that "fixed satellite and fixed terrestrial wireless Internet access providers" exert "some pressure on [broadband] providers."

2018 Order at ¶ 125. When considering this wider range of providers, the Commission estimates that 43.9 percent of all Americans have a choice of three or more providers offering high-speed broadband (download speeds of 25 Mbps and upload speeds of 3Mbps and higher), and about 95 percent have a choice of three or more providers offering slower speeds. *Id.* ¶ 124. But the Commission's own discussion makes clear the limited conclusions these figures can support as to competition in wireline services. First, the Commission acknowledges that fixed satellite and fixed terrestrial wireless Internet access service may not be "broadly effective competitors." *Id.* ¶ 125. So, at best, we can only anticipate that "these services, where available, place *some* competitive constraints on wireline providers." *Id.* (emphasis added). Second, the Commission "make[s] no finding as to whether lower speed fixed Internet access services are in the same market as higher speed fixed Internet access services." *Id.* ¶ 124 n.454. Taken together, the Commission fails to provide a fully satisfying analysis of the competitive constraints faced by broadband providers.

We are, however, 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. *Id.* ¶ 126. 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. *Id.* 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.

Second, Petitioners worry that even if there is competition in the local market for broadband, once a consumer chooses a broadband provider, that provider has a monopoly on access to her. In turn, the provider can use that access to control the interaction between edge providers, end users, and others. The Title II Order took this "terminating access monopoly" concern seriously and found that it enabled broadband providers of all types and sizes to raise prices. Petitioners claim that the Commission's 2018 Order shifts from this previous position without explanation. This is not so.

The Commission offered several reasons for rejecting its prior finding of a terminating monopoly. For example, it notes that many customers can access edge provider's content from multiple sources (i.e., fixed and mobile). *See 2018 Order* ¶ 136. In this way, there is no terminating monopoly. *Id.* Additionally, the Commission argued that even if a terminating monopoly exists for some edge providers the commenters did not offer sufficient evidence in the record to demonstrate that the resulting prices will be inefficient. *Id.* ¶ 137. Given these reasons, we reject Petitioners' claim that the Commission's conclusion on terminating monopolies is without explanation.

Third, Petitioners argue that the Commission disregards its previous determination that broadband provider market power is strengthened by the high costs of switching broadband providers. The Title II Order found that, when switching providers, "consumers may experience []: high upfront device installation fees; long-term contracts and early termination fees; the activation fee when changing service providers; and compatibility costs of owned equipment not working with the new service." *Title II Order* ¶ 81. However, the Commission's

most recent order was skeptical of whether the rate of consumers changing providers — the "churn" rate — is as low as it previously found. *See 2018 Order* ¶ 128. More importantly, the Commission contends that low churn rates do not *per se* indicate market power. *See id.* Instead, they could be a function of competitive actions taken by broadband providers to attract and retain customers. *See id.* And such action to convince customers to switch providers, the Commission argues, is indicia of material competition for new customers. *See id.* This rationale provides a reasoned explanation for departing from prior findings on churn rates and broadband provider market power.

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.

Petitioners' argument relies on Section 706, which directs "[t]he *Commission*" to "encourage the deployment" of broadband, 47 U.S.C. § 1302(a) (emphasis added), and Section 1 of the Communications Act, which likewise directs the FCC

to make rapid and efficient communications services available to all, *id.* § 151. According to Petitioners, these mandates mean that the Commission may not "delegate" fundamental questions of national telecommunications policy to the Department of Justice and the Federal Trade Commission.

Petitioners liken this case to *Local 1976, United Brotherhood of Carpenters & Joiners v. NLRB*, 357 U.S. 93 (1958), where the Supreme Court held that an agency may not "abandon an independent inquiry into the requirements of its own statute and mechanically accept standards elaborated by another agency under a different statute for wholly different purposes." *Id.* at 111. But the Commission has not "mechanically accept[ed] the standards" of other laws as satisfying its own. Instead, it has conducted an independent assessment of the degree of problematic conduct that has been and will be committed by broadband providers and whether, as a policy matter, the benefits of restricting that conduct outweigh the costs. A reasonable piece of that policy-making puzzle, then, is an assessment of other regulatory regimes that might already limit the conduct in question. Therefore, it was not impermissible for the Commission to recognize that the Department of Justice and Federal Trade Commission have the ability to police blocking and throttling practices *ex post*.

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," *State Farm*, 463 U.S. at 43, 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); *see also* 47 U.S.C. § 615 (The Wireless Communication and Public Safety Act of 1999, Pub. L. No. 106–81, § 3, 113 Stat. 1286, 1287, directs the Commission to "encourage and support efforts by States to deploy comprehensive end-to-end emergency communications infrastructure and programs" and to "consult and cooperate

with State and local officials responsible for emergency services and public safety.").

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); *accord Lindeen v. SEC*, 825 F.3d 646, 657 (D.C. Cir. 2016) ("A rule is arbitrary and capricious if an agency fail[s] to consider * * * a factor the agency must consider under its organic statute.") (internal quotation marks omitted). When, as here, "Congress has given an agency the responsibility to regulate a market such as the telecommunications industry that it has repeatedly deemed important to protecting public safety," then the agency's decisions "must take into account its duty to protect the public." *Nuvio*, 473 F.3d at 307.

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.

Santa Clara County, for example, explained that the 2018 Order would have a "profound negative impact on public welfare, health, and safety" communications. J.A. 3332. The County and its fire department have implemented new, Internet-based services that depend on community members'

speedy and unimpeded access to broadband Internet. "For example, the County's virtual Emergency Operations Center, used by the County and County Fire to coordinate crisis response, relies on contributors' access to the internet on nondiscriminatory terms." J.A. 3333; *see also* J.A. 3338 (describing an Internet-based system that allows emergency personnel to log in through "a web interface and populate, monitor, and act on situational data"); *id.* (describing a critical "web-based public alert system" that "provides immediate contact with members of the public via email, text, or phone on matters such as evacuation or shelter-in-place orders, fires, unhealthy air quality, and excessive heat warnings").

Similarly, the California Public Utility Commission warned that the 2018 Order could "profoundly impair[]" the ability of state and local governments "to provide comprehensive, timely information to the public in a crisis." J.A. 259. Catherine Sandoval, former Commissioner of the California Public Utilities Commission, J.A. 2481, noted that the Utility Commission authorized energy utility companies to expend taxpayer funds on Internet-based "demand response programs" that are "activated during times of high demand, or when fire or other emergencies make conservation urgent," and "call on people and connected devices to save power." J.A. 2514–2515. Pacific Gas and Electric, for example, implemented a "gas detection box that uses readily available [geographic information systems] platforms and tablets" in the wake of an earthquake to "quickly survey * * * damaged areas and identify and prioritize work to address gas leaks." J.A. 2511. And the California Department of Forestry and Fire Protection "depends on broadband access, speed, and reliability" in order to "track fire threats, fires, and manage forests and vegetation" to prevent fires. J.A. 2530–2531.

Any blocking or throttling of these Internet communications during a public safety crisis could have dire, irreversible results. "[E]ven if discriminatory practices might later be addressed on a post-hoc basis by entities like the Federal Trade Commission," the harm to the public "cannot be undone." J.A. 3333.

On appeal, the Governmental Petitioners attempt to supplement their record comments with documentation of an incident involving the (apparently accidental) decision by Verizon to throttle the broadband Internet of Santa Clara firefighters while they were battling a devastating California wildfire. "To ensure that we review only those documents that were before the agency, we do not allow parties to supplement the record unless they can demonstrate unusual circumstances justifying a departure from this general rule." *District Hosp. Partners v. Burwell*, 786 F.3d 46, 55 (D.C. Cir. 2015) (internal quotation marks omitted). Unusual circumstances will be found where (i) "[t]he agency deliberately or negligently excluded documents," (ii) "the district court needed to supplement the record with 'background information' in order to determine whether the agency considered all of the relevant factors," or (iii) "the agency failed to explain administrative action so as to frustrate judicial review." *American Wildlands v. Kempthorne*, 530 F.3d 991, 1002 (D.C. Cir. 2008).

The throttling incident involving the Santa Clara firefighters occurred in June 2018, six months after the 2018 Order was issued. Yet, the Governmental Petitioners have made no attempt to demonstrate the type of unusual circumstances that would allow this court to consider that post-Order evidence. Therefore, we decline to consider it.

Even without that evidence, though, the direct and specific comments by Santa Clara County, former California Public

Utility Commissioner Sandoval, and others repeatedly raised substantial concerns about the Commission's failure to undertake the statutorily mandated analysis of the 2018 Order's effect on public safety.[2]

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. Instead, the Commission offers two defenses. The Commission argues that the June 2018 incident with Verizon demonstrates that light-touch rules promote public safety because, in response to the negative public reaction to its throttling practice, Verizon introduced a new plan for public safety customers. The Commission also reasons that the Governmental Petitioners' concerns "about government services are issues that apply to all edge providers, public and private." Commission Br. 95. Those arguments are too little, too late.

First, the argument about Verizon's response was not made in the 2018 Order to explain the Commission's bypassing of the required public-safety analysis. In fact, it was not made at all because, as noted, this incident postdated the final 2018 Order by half a year. Just as we will not expand the record to consider documentation about Verizon's decision to throttle the Santa Clara County Fire Department after the 2018 Order

[2] Most of Santa Clara County's comments appear to have been made outside the comment window. However, the Commission has not suggested that those comments are untimely. Therefore, it has itself forfeited any forfeiture challenge to Santa Clara County's arguments. *See National Corn Growers Ass'n v. EPA*, 613 F.3d 266, 275 (D.C. Cir. 2010) (considering letter where EPA did not suggest until oral argument that it was untimely); *BNSF Ry. Co. v. Surface Transp. Bd.*, 604 F.3d 602, 611 (D.C. Cir. 2010) ("[A] forfeiture can be forfeited by failing on appeal to argue an argument was forfeited.").

was issued, we will not consider the public statements made by Verizon in response to that controversy. Under the Administrative Procedure Act as elsewhere, what is good for the goose is good for the gander.

Nor, for that matter, will we consider arguments about those statements' relevance to the 2018 Order surfaced for the first time on appeal. "[C]ourts may not accept appellate counsel's *post hoc* rationalization for agency action," because longstanding Supreme Court precedent "requires that an agency's discretionary order be upheld, if at all, on the same basis articulated in the order by the agency itself." *Temple Univ. Hosp. v. NLRB*, 929 F.3d 729, 734 (D.C. Cir. 2019) (quoting *Erie Brush & Mfg. Corp. v. NLRB*, 700 F.3d 17, 23 (D.C. Cir. 2012)); *see SEC v. Chenery Corp.*, 332 U.S. 194, 196 (1947).

Second, the Commission did not claim in the 2018 Order that the public safety issues raised by the Governmental Petitioners could be ignored because they were redundant of the arguments made by edge providers. Therefore, the Commission's argument is an off-limits *post hoc* rationalization. *See Temple Univ. Hosp.*, 929 F.3d at 734.

And the argument is facially inadequate to boot. The Commission's after-the-fact reasoning entirely misses the fact that, whenever public safety is involved, lives are at stake. As noted by Santa Clara County, unlike most harms to edge providers incurred because of discriminatory practices by broadband providers, the harms from blocking and throttling during a public safety emergency are irreparable. People could be injured or die. *See* J.A. 3333; s*ee also Hawkins v. Defense Logistics Agency of the Dep't of Defense*, 99 F.3d 1149 (Table), *1 (10th Cir. 1996) (using imminent threat of death as an example of irreparable harm); *New York v. Sullivan*, 906 F.2d

910, 918 (2d Cir. 1990) (finding irreparable harm when the "[d]enial of benefits potentially subjected claimants to deteriorating health, and possibly even death").

Apparently recognizing the problem, the Broadband Intervenors United States Telecom, *et al.* try a different tack. They argue that—unbeknownst even to the Commission itself—the 2018 Order did consider public safety. The four references that the Broadband Intervenors cite do not hold up.

First, the Broadband Intervenors claim that the Commission found "'scant evidence' of threats to public safety." Broadband Br. 37 (citing *2018 Order* ¶ 265 & n.978). What the Commission actually found is that there was "scant evidence that end users, under different legal frameworks, have been prevented by blocking or throttling from accessing the content of their choosing." *2018 Order* ¶ 265. No mention of public safety.

Second, the Broadband Intervenors say the 2018 Order allowed that States "could continue to play their vital role" in advancing public safety. Broadband Br. 37 (citing *2018 Order* ¶ 196 & n.737). Not quite. The full quote was that States "will continue to play their vital role in protecting consumers from fraud, enforcing fair business practices, for example, in advertising and billing, and generally responding to consumer inquiries and complaints." *2018 Order* ¶ 196. While important, those topics are not about public safety.

Third, the Broadband Intervenors point to the Commission's conclusion that national security objections to the 2018 Order were vague and unsubstantiated. Broadband Br. 37 (citing *2018 Order* ¶ 258 n.943). But that Commission statement was made in reference to a comment in the record about "a September 11-type of failure of imagination about risks to America's national security and democracy." *2018*

Order ¶ 258 n.943. That narrow and isolated response says nothing about the multi-faceted public safety concerns associated with subjecting emergency services providers, other public health providers, and the members of the public who depend on those services to paid prioritization and blocking and throttling.

Finally, the Broadband Intervenors note the Commission's conclusion that "any remaining unaddressed harms" were "small relative to the costs of implementing more heavy-handed regulation." Broadband Br. 37 (citing *2018 Order* ¶ 116). That Rorschachian speculation is hardly the focused and specific study of public safety implications that the law requires.

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

Both sets of Petitioners argue 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. *See* Mozilla Br. 71–72; Governmental Pet'rs' Br. 29–32. The Commission acknowledged, as it must, the significance of reliance interests as a potential weight against its decision, *see 2018 Order* ¶ 159; *cf. Fox Television*, 556 U.S. at 515–516; *Mingo Logan Coal Co. v. EPA*, 829 F.3d 710, 718–719 (D.C. Cir. 2016), 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; *see also id*. at n.588 (quoting comment observing that the complainants had not "provide[d] any empirical basis for speculating that edge investment since 2015 would have been substantially lower in the absence of Title II regulation"). Second, even if reliance had been shown, the Commission maintains that it would not have been reasonable under the circumstances. *Id*. ¶ 159.

As to the Commission's first argument, the issue is whether the Commission was arbitrary or capricious in finding that there were no serious reliance interests attributable to the Title II Order because it was not convinced that edge providers' investments in the time since the Title II Order had been made in reliance on that order. We lack adequate briefing on the issues we would need to settle here, including what findings an agency must make to support a conclusion that serious reliance interests do not exist in the first place—issues that neither the Supreme Court, *see Encino Motorcars, LLC v. Navarro*, 136 S. Ct. 2117 (2016); *Fox Television*, 556 U.S. at 515–516, nor our circuit has resolved. Given as much, and in light of the availability of other grounds for decision, we will not pass on the Commission's first argument. Rather, we 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.

Besides noting the record's loose link between investment and particular rules, the Commission says that it was not persuaded that any "such reliance would have been reasonable in any event, given the lengthy prior history of information service classification of broadband Internet access service, which we are simply restoring here after the brief period of departure initiated by the *Title II Order*." *2018 Order* ¶ 159.

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. First, the 2015 rules had been in effect "barely two years before the Commission proposed to repeal them," a limited period to engender reliance. Commission Br. 92–93; *see 2018 Order* ¶ 159 (referring to a "brief period of departure" from the prior classification policy "initiated by the *Title II Order*"); *see also Encino Motorcars*, 136 S. Ct. at 2126 (describing "decades of industry reliance on the Department's prior policy"); *USTA*, 825 F.3d at 709–710 (crediting 2015 Commission's rebuttal to Petitioners' asserted reliance interests on the basis that "just five years after *Brand X*" the Commission sought comments on reclassifying broadband). Second, in 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. *See 2018 Order* ¶ 159 (referring to "lengthy prior history of information service classification of broadband Internet access service").

In its brief before us, the Commission adds a third point. In the two-year period between the Title II Order and the Commission's announcement of its intention to return to prior policies, the Title II Order faced persistent legal challenges. Commission Br. 93. (Indeed, certiorari on the legal assaults was denied only on November 5, 2018, *see, e.g., United States Telecom Ass'n v. FCC*, 139 S. Ct. 475 (2018), after issuance of the 2018 Order itself, with three Justices dissenting from denial of certiorari, *id*.) Any reliance on the rules of the Title II Order would not have been reasonable unless tempered by substantial concerns for legal or political jeopardy.

But as we already mentioned, Petitioners do not confine themselves to the Title II Order as the basis for their claim

(though they seem to view our *overturning* the Commission's overturning of that order as the proper remedy). According to Mozilla, edge investment has "relied not simply on a particular classification decision, but on the Commission's unwavering commitment * * * to use what powers it has to ensure that consumers would have free access to all lawful internet content" "beginning at least with" a 2005 Commission policy statement. Mozilla Br. 71–72; *see In re Appropriate Framework for Broadband Access to the Internet over Wireline Facilities*, 20 FCC Rcd. 14986 (2005) ("*2005 Policy Statement*"). One of the comments Mozilla points to takes the matter back to the statement of Commission Chairman Powell in February 2004 outlining four principles of "internet freedom," J.A. 3348 & n.5, reflected in the *2005 Policy Statement*. Each of those principles was meant "to encourage broadband deployment and preserve and promote the open and interconnected nature of the public Internet." *2005 Policy Statement*, 20 FCC Rcd. at 14988. And Governmental Petitioners claim the 2018 Order "overturned a much longer history of open Internet protections." Governmental Pet'rs' Br. 31.

The Commission did not expressly respond to this variant of the "reliance" argument. But Petitioners' effort to define the status quo as a whole era of Commission policy, from Chairman Powell's 2004 statement to the 2018 Order (or at least the underlying NPRM), renders the claim more or less non-falsifiable. While outside observers may associate "light touch" with a distinct era in regulation and "open Internet" with another era, the successive Commission majorities have consistently vowed fealty to both. The Title II Order at multiple locations insisted that the new policy was "light-touch," *see, e.g.*, *Title II Order* ¶¶ 5, 37, 39, 382, and the 2018 Order similarly sees its policy as a new and better way to advance precisely what Petitioners see as the Commission's

age-old policy, an "open Internet," *see 2018 Order* ¶¶ 1, 4, 18. Here the Commission, though recognizing that the phrase "net neutrality" is in some circles equated with application of Title II, draws a clear contrast between "net neutrality *per se*" and "Title II regulation," suggesting that the Powell principles evinced a commitment to the former but not the latter. 2018 Order ¶ 95. And, far from eschewing any effort to prevent unreasonable discrimination, it sees its insistence on transparency as well-designed to advance that goal. *See, e.g., id*. ¶¶ 116, 142, 153, 209. Petitioners may distrust the Commission's stated dedication to an open Internet, but the ubiquity of Commissioners' attachment to an open Internet (as well as to "light touch") makes it impossible to rest a reliance claim on some notion that either phrase represented a discrete policy that has appeared and disappeared with each zig or zag of Commission analysis.

We 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.

For purposes of the Communications Act, a "pole attachment" is defined as an "attachment * * * to a pole, duct, conduit, or right-of-way owned or controlled by a utility." 47 U.S.C. § 224(a)(4). As the Commission has recognized, pole attachments are "crucial to the efficient deployment of communications networks including, and perhaps especially, new entrants." *See Title II Order* ¶ 56; *id*. ¶ 413 (recognizing that Title II classification "offers other benefits at the state level, including access to public rights of way, which some broadband providers reportedly utilize to deploy networks") (internal quotation marks omitted). The Commission has also "recognized repeatedly" that "[l]eveling the pole attachment playing field for new entrants that offer solely broadband services * * * removes barriers to deployment and fosters additional broadband competition." *Id*. ¶ 478.

The Communications Act establishes as a default rule that "the Commission shall regulate the rates, terms, and conditions for pole attachments." 47 U.S.C. § 224(b)(1). Yet the Act also allows any State to displace Commission regulation if the State certifies to the Commission that it is regulating pole attachments. *See id.* § 224(c) ("Nothing in this section shall be construed to apply to, or to give the Commission jurisdiction with respect to rates, terms, and conditions or access to poles, ducts, conduits, and rights-of-way * * * for pole attachments in any case where such matters are regulated by a State."). Approximately twenty States regulate pole attachments under this regime. *See States That Have Certified That They Regulate Pole Attachments*, 25 FCC Rcd. 5541, 5541–5542 (May 19, 2010); *2018 Order* ¶ 185.

But this whole regulatory scheme applies only to cable television systems and "telecommunications service[s]"—categories to which, under the 2018 Order, broadband no longer belongs. *See* 47 U.S.C. § 224(a)(4) (defining "pole attachment" as "any attachment by a *cable television system or provider of telecommunications service* to a pole, duct, conduit, or right-of-way owned or controlled by a utility") (emphasis added); *id*. § 224(f)(1) ("A utility shall provide a *cable television system or any telecommunications carrier* with nondiscriminatory access to any pole, duct, conduit, or right-of-way owned or controlled by it.") (emphasis added). Section 224's regulation of pole attachments simply does not speak to information services. Which means that Section 224 no longer speaks to broadband.

The Commission must have seen this problem coming because it sought comment on the specific issue of "the impact of reclassification * * * with respect to pole attachments." *See* NPRM at ¶ 69. The Governmental Petitioners foresaw it too. During the comment period, they alerted the Commission that reclassification would disrupt this settled legal and regulatory foundation. *See* J.A. 234–240. Given that "[u]nauthorized, and sometimes hazardous, attachments to poles are a regular occurrence," the Governmental Petitioners expressed concern that broadband providers might invoke reclassification "to ignore, avoid, deny or undercut" the States' power to impose pole-attachment safety regulations. J.A. 236. They also warned that reclassification would take away broadband providers' "statutory *right*, under federal law, to nondiscriminatory, just and reasonable access to the poles and conduit that cable providers and telecommunications carriers enjoy." J.A. 236. On top of that, reclassification "without a successful alternative for pole attachment rights under federal law could delay or harm [broadband] deployment and that, in

turn, could negatively affect competition * * * throughout the nation." J.A. 239.

The Commission's response makes no sense. In some portions of the 2018 Order, the Commission candidly acknowledged that reclassification means that Section 224 no longer governs broadband. *See 2018 Order* ¶ 163 n.600 ("We make clear that as a result of our decision to restore the longstanding classification of broadband Internet access service as an information service, Internet traffic exchange arrangements are no longer subject to Title II and its attendant obligations," including obligations under Section "224 (pole attachments).").

But in other portions of the Order, the Commission seemed to whistle past the graveyard, implying without reasoned basis that Section 224 would continue to govern reclassified broadband. *See 2018 Order* ¶ 185 ("[I]n the twenty states and the District of Columbia that have reverse-preempted Commission jurisdiction over pole attachments, those states rather than the Commission are empowered to regulate the pole attachment process."); *id*. ¶ 186 ("[W]e caution pole owners not to use this *Order* as a pretext to increase pole attachment rates or inhibit broadband providers from attaching equipment—and we remind pole owners of their continuing obligation to 'offer rates, terms, and conditions [that] are just and reasonable.'") (quoting 47 U.S.C. § 224(b)(1)); *id.* ¶ 196 ("Nor do we deprive the states of any functions expressly reserved to them under the Act, such as * * * exclusive jurisdiction over poles, ducts, conduits, and rights-of-way when a state certifies that it has adopted effective rules and regulations over those matters under section 224(c).").

Both cannot be true.

The best explanation the Commission provided was its reference to the 2007 Wireless Broadband Order. "As to section 224," the Commission said, the Wireless Broadband Order directs that "where the same infrastructure would provide 'both telecommunications and wireless broadband Internet access service,' the provisions of section 224 governing pole attachments would continue to apply to such infrastructure used to provide both types of service." *2018 Order* ¶ 188 (quoting 22 FCC Rcd. at 5922–5923). According to the Commission, its "rationale from 2007, that commingling services does not change the fact that the facilities are being used for the provisioning of services within the scope of the statutory provision, remains equally valid today." *Id*. ¶ 189. That "clarification," the Commission concluded, "will alleviate concerns that wireless broadband Internet access providers not face increased barriers to infrastructure deployment as a result of today's reclassification." *Id*.

That is all well and good for providers who "commingl[e]" telecommunication and broadband services. *Wireless Broadband Order* at 5922. But it does nothing to "alleviate concerns" regarding standalone broadband, which Americans have come to "increasingly * * * favor." J.A. 2268 (citing letter from members of Congress); *see also* J.A. 2270 (discussing "new entrants such as Google Fiber who offer standalone broadband services"). That is because the plain text of Section 224 speaks only of telecommunications services and cable television services. So under the 2018 Order, the statute textually forecloses any pole-attachment protection for standalone broadband providers.

The Commission was required to grapple with the lapse in legal safeguards that its reversal of policy triggered. *See Colorado Fire Sprinkler, Inc. v. NLRB*, 891 F.3d 1031, 1038 (D.C. Cir. 2018); *see also Lone Mountain Processing, Inc. v.*

Secretary of Labor, 709 F.3d 1161, 1164 (D.C. Cir. 2013). But it failed to do so. Because the 2018 Order was arbitrary and capricious in this respect, we remand for the Commission to confront the problem in a reasoned manner. *See Fogo De Chao (Holdings) Inc. v. United States Dep't of Homeland Sec.*, 769 F.3d 1127, 1141 (D.C. Cir. 2014) (agency's judgment "fails the requirement of reasoned decisionmaking under arbitrary and capricious review" where it "was neither adequately explained * * * nor supported by agency precedent"); *see also Hawaiian Dredging Constr. Co. v. NLRB*, 857 F.3d 877, 881 (D.C. Cir. 2017) (citing *State Farm*, 463 U.S. at 52).

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. *See* 47 U.S.C. §§ 214(e), 254(e). The Commission brushed off their concern. That was straightforward legal error which requires remand.

Since its inception, the Commission has been responsible for "mak[ing] available, so far as possible * * * a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges." Communications Act of 1934, Pub. L. No. 416, 48 Stat. 1064, 1064 (codified at 47 U.S.C. § 151); *see also National Lifeline*, 921 F.3d at 1106. In 1985, the Commission implemented this national policy of universal service by creating the Lifeline Program. *MTS and WATS Market Structure; and Establishment of a Joint Board; Amendment*, 50 Fed. Reg. 939 (Jan. 8, 1985); *see also National Lifeline*, 921

F.3d at 1106 (describing the Lifeline Program as meant to "ensure * * * low-income consumers [have] access to affordable, landline telephone service").

In 1996, Congress codified the Lifeline Program as part of the Communications Act. *See* 47 U.S.C. §§ 214, 254. The statutory provisions set forth, among other things, a program-funding mechanism, guidelines for state participation, and a designation scheme for determining Program eligibility. *Id.* §§ 214, 254(d) & (f). The Act also declared that "[u]niversal service is an evolving level of telecommunications services that the Commission shall establish periodically * * *, taking into account advances in telecommunications and information technologies and services." *Id.* § 254(c)(1).

With Congress's directive in mind, the Commission added broadband to the Lifeline Program in 2016. *See In re Lifeline & Link UP Reform and Modernization*, 31 FCC Rcd. 3962, 3964 (2016) ("*Lifeline Order*"); 47 C.F.R. § 54.403. In doing so, it sought to "enable all Americans to share in the opportunities broadband connectivity provides" by allowing "low income consumers to apply Lifeline's $9.25 per month discount to stand-alone broadband service." FCC, Lifeline Support for Affordable Communications, https://www.fcc.gov/sites/default/files/lifeline_support_for_affordable_communications.pdf. In the Lifeline Order, the Commission repeatedly referenced Congress's overriding command to provide *"telecommunication services* to consumers." *Lifeline Order* at 3964 (emphasis added); *see also id.* at 3970, 3972, 3975, 3994, 4084.

That made sense, given that Congress had tethered Lifeline eligibility to common-carrier status. To receive Lifeline support under the Act, an entity must be designated as an eligible telecommunications carrier—a category that

extends to common carriers regulated under Title II. *See* 47 U.S.C. §§ 254(e), 214(e). This congressional understanding pervades the statute. *See, e.g.*, *id.* § 214(e)(2) ("A State commission shall upon its own motion or upon request designate a *common carrier* that meets the requirements of paragraph (1) as an eligible telecommunications carrier for a service area designated by the State commission.") (emphasis added); *id*. § 214(e)(3) ("If no *common carrier* will provide the services that are supported by Federal universal service support mechanisms * * *, the Commission [or a State commission] shall determine which *common carrier or carriers* are best able to provide such service to the requesting unserved community or portion thereof and shall order such carrier or carriers to provide such service.") (emphasis added); *id*. § 214(e)(6) ("In the case of a *common carrier* providing telephone exchange service and exchange access that is not subject to the jurisdiction of a State commission, the Commission shall upon request designate such a *common carrier* that meets the requirements of paragraph (1) as an eligible telecommunications carrier for a service area designated by the Commission.") (emphasis added).

As a result, broadband's eligibility for Lifeline subsidies turns on its common-carrier status. *See In re FCC 11-161*, 753 F.3d 1015, 1048–1049 (10th Cir. 2014) (observing, before broadband was classified as a telecommunications service, that "broadband-only providers * * * cannot be designated as 'eligible telecommunications carriers'" because "under the existing statutory framework, only 'common carriers' * * * are eligible to be designated as 'eligible telecommunications carriers'"). As a matter of plain statutory text, the 2018 Order's reclassification of broadband—the decision to strip it of Title II common-carrier status—facially disqualifies broadband from inclusion in the Lifeline Program.

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).

For whatever it is worth, the Commission has proven unable to explain itself in this litigation either. Rather than engage with the Governmental Petitioners' statutory argument, the Commission takes the position that it has "broad discretion" to "defer consideration of particular issues to future proceedings," and it "need not address all problems in one fell swoop." Commission Br. 110 (quoting *United States Telecom Ass'n v. FCC*, 359 F.3d 554, 588 (D.C. Cir. 2004)).

That is a non-sequitur. If, as the statute seems to clearly say, the Commission's reclassification of broadband as an information service *precludes* the agency from solving this problem in future proceedings, the possibility of future

proceedings is irrelevant. At the very least, the Governmental Petitioners identified a "relevant and significant" problem that the Commission was obligated to address in a reasoned way. *See Liliputian Sys., Inc. v. Pipeline & Hazardous Materials Safety Admin.*, 741 F.3d 1309, 1312 (D.C. Cir. 2014) ("An agency's failure to respond to relevant and significant public comments generally demonstrates that the agency's decision was not based on a consideration of the relevant factors.") (formatting modified). So we must remand this portion of the 2018 Order for the Commission to address the issue now.

G. Cost-Benefit Analysis

Petitioners next take exception to the Commission's cost-benefit analysis. *See 2018 Order* ¶¶ 304–323; Mozilla Br. 72–74. They express two sets of concerns. The first set goes to the general nature of the analysis (qualitative rather than quantitative) and to the NPRM's allegedly having failed to alert the public to the possibility that the Commission would pursue a purely qualitative analysis. The second set goes to some specific treatments of benefits and costs. We review cost-benefit analyses with deference, *National Ass'n of Home Builders v. EPA*, 682 F.3d 1032, 1040 (D.C. Cir. 2012), and here find nothing arbitrary in the Commission's choice of methodology or explanation of its conclusions. Petitioners' objections to the Commission's treatment of several issues arguably classifiable as part of cost-benefit analysis are treated under separate headings of this opinion. *See* Parts V.A–B.

The notice argument rests on a claim that the NPRM's discussion committed the Commission to a quantitative analysis under OMB Circular A-4. It fails on two grounds: the NPRM made clear that the Commission was not wedded to the idea of following the Circular, and the Circular itself calls for

a qualitative analysis under circumstances that the Commission reasonably invoked.

The Commission said in the NPRM that it "*propose*[*s*] to follow the guidelines in Section E * * * of * * * Circular A-4." *NPRM* ¶ 107 (emphasis added). It then added that it was "seek[ing] comment on following Circular A-4 generally" and "on any specific portions of Circular A-4 where the Commission should *diverge* from the guidance provided." *Id*. (emphasis added). "Commenters should explain why particular guidance in Circular A-4 *should not be followed* in this circumstance and should propose alternatives." *Id*. (emphasis added). The passage leaves little doubt that the Commission envisioned possibly deviating from Circular A-4 in ways large and small, necessarily including a possibility of electing qualitative analysis even where the Circular contemplates quantitative. Even assuming that the Commission applied a laxer standard than prescribed by the Circular for choosing qualitative over quantitative (see below), notice of such a possible detour was adequate and the Commission's way of proceeding was a "logical outgrowth" of the notice, as suffices under our cases. *See Covad Commc'ns Co. v. FCC*, 450 F.3d 528, 548 (D.C. Cir. 2006); *see also USTA*, 825 F.3d at 700.

Further, although not essential to rejection of this claim, the Commission's ultimate decision to conduct a qualitative analysis appears consistent with the Circular. The latter provides that "where no quantified information on benefits, costs, and effectiveness can be produced, the regulatory analysis should present a qualitative discussion of the issues and evidence." OMB Circular A-4 at 10 (2003). The Commission, after finding that "the record provides little data that would allow [the agency] to quantify the magnitudes of many of" the costs and benefits, adopted the qualitative

approach, seeking to assess "the direction of the effect on economic efficiency." *2018 Order* ¶ 304; *cf. National Ass'n of Regulatory Util. Comm'rs v. FCC*, 737 F.2d 1095, 1140–1141 (D.C. Cir. 1984) (holding that the Commission had acted within the scope of its "broad discretion" in a context where "no reliable data was available").

Mozilla makes no effort to undermine the Commission's finding that a quantitative analysis was infeasible. In fact, as we will see shortly, its fault-finding (apart from matters addressed elsewhere in this opinion) focuses on exactly the sort of issues on which hard and convincing quantitative data would be difficult to find—the sort of issues that are the basis of the Circular's warning that "[w]hen important benefits and costs cannot be expressed in monetary units," attempting a quantitative cost-benefit analysis "can even be misleading, because the calculation of new benefits in such cases does not provide a full evaluation of all relevant benefits and costs." OMB Circular A-4 at 10.

We should add that we are hard-pressed to imagine how the notice defect claimed by Petitioners might have hurt them in a legally significant way. Notice typically serves to help parties marshal their arguments and analyses to persuade an agency to see matters their way. If Petitioners had offered an array of useful quantitative analyses and the Commission had turned it aside because of its decision in favor of a qualitative approach, we could understand. But Petitioners claim no such thing, and it is hard to imagine that an agency pursuing qualitative analysis would on that account turn away a quantitative one (which, one supposes, would typically encompass qualitative elements). *Cf.* IA Br. 19 (*criticizing* the Commission for failing to "acknowledg[e] that economists might not yet be able to" quantify certain economic effects of the Title II Order).

As to the substance of the cost-benefit analysis, Petitioners set out four challenges. Two of these are addressed separately in this opinion—the claims that the Commission overlooked particular reliance interests, *see* Part V.D., and overstated the costs of Title II classification by relying selectively on studies whose defects it ignored, *see* Part V.A.

We thus turn directly to the other two, which overlap so heavily as to amount to one. We identify them separately, but will treat them together. 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, *see* J.A. 1098, and news stories from 2007–2008 describing how "Comcast had blocked users' ability to share copies of the King James Bible," Mozilla Br. 73–74; *see also* J.A. 2429 & n.198.

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." Mozilla Br. 73; *see* J.A. 1097. This bare-bones objection is not enough to pose an issue for the court, which after all is not generally expected to do counsel's work. *See Masias v. EPA*, 906 F.3d 1069, 1077 (D.C. Cir. 2018). In any event, the 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. The agency says as much, noting that "the transparency rule and the ISP commitments backed up by FTC enforcement are targeted to preserving free expression, particularly the no-blocking commitment," and that "[t]he market competition that antitrust law preserves will protect values such as free expression." *2018 Order* ¶ 153. At the same time, the Commission frankly acknowledges that "[t]he competitive process and antitrust would not protect free expression in cases where consumers have decided that they are willing to tolerate some blocking or throttling in order to obtain other things of value." *Id*. at n.558.

As to harms akin to those such as interference with file-sharing, the Commission observes that commenters could point "only to a handful of incidents that purportedly affected Internet openness, while ignoring the two decades of flourishing innovation that preceded the *Title II Order*." *2018 Order* ¶ 110; *see also id*. ¶ 116. The colorful example of difficulties with downloading the King James Bible arose from Comcast's "throttling of BitTorrent, a peer-to-peer networking protocol," *id*. ¶ 112, which had nothing in particular to do with the Bible, *see* J.A. 2429 n.198, and which Petitioners do not suggest is of a type likely to recur. Further, Petitioners do nothing to refute the agency's claim that "since 2008, few tangible threats to the openness of the Internet have arisen." *2018 Order* ¶ 113; *see id*. ¶¶ 111–114 (describing examples of similar conduct).

Against this backdrop of what the Commission views as slim empirical support for relevant harms, *see, e.g., 2018 Order* ¶ 153, the agency argues that the benefits of "maintaining a free and open Internet" are "positive and considerable," *id*. ¶ 313. It contends that its "light-touch" strategy—rooted in

transparency rules and "enforcement under antitrust and consumer protection law," *id*.—will protect Internet openness and help "prevent and remedy harmful behaviors by ISPs," *id*., without the costs imposed by Title II regulations (measured by "the economic welfare of consumers, ISPs, and edge providers," *id*. ¶ 306). For example, a "light-touch" route incentivizes greater "deployment of [broadband] service to unserved areas," *id*. ¶ 308, so that more people can get online sooner and enjoy content at higher speeds—especially those "in rural and/or lower-income communities" with "underserved and hard-to-reach populations," *id*. ¶ 106. Such an outcome, presumably, would bolster democratic discourse and participation.

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, *see* Mozilla Reply Br. 36; *cf.* IA Br. 25–26 (claiming Title II Order promoted edge investment); Part V.A (discussing IA's claim). 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." *Home Builders*, 682 F.3d at 1040. We therefore reject Petitioners' objections on this front.

H. Data Roaming Rates

Petitioner NTCH, Inc. (NTCH) argues that the 2018 Order failed to address data roaming rates charged by broadband providers. According to NTCH, the Commission unlawfully disregarded its comments that stressed the need for Title II regulation given the allegedly high data roaming rates. But the Commission's 2018 Order classified mobile broadband—of which data roaming is a service—as an information service, thus making Title II regulation inapplicable. Thus, the Commission's failure to respond to NTCH's comments regarding data roaming is "significant only insofar as it demonstrates that the agency's decision was not based on a consideration of the relevant factors." *Texas Mun. Power*

Agency v. EPA, 89 F.3d 858, 876 (D.C. Cir. 1996) (quoting *Thompson v. Clark*, 741 F.2d 401, 409 (D.C. Cir. 1984)). NTCH offers no reason why the value of regulating data roaming rates under Title II would be important enough to affect the agency's decision to reclassify mobile broadband. Given that we conclude, *infra* Part II, that the classification of mobile broadband as an information service was reasonable, the Commission had no obligation to consider NTCH's comments urging for Title II regulations for mobile broadband providers' data roaming agreements.

I. Procedural Challenges

Before the Commissioner, Petitioner National Hispanic Media Coalition ("NHMC") moved to include in the record and for the Commission to consider informal consumer complaints filed under the previous rules. NHMC had itself obtained these documents from the Commission under the Freedom of Information Act. NHMC argues that these materials are relevant because the May 2017 Notice of Proposed Rulemaking specifically requested information about the impact of Title II classification on consumers and ISPs' conduct. The Commission denied the motion, finding that it was "exceedingly unlikely" that those complaints raised any issue that was not already identified in "the voluminous record in this proceeding." *2018 Order* ¶ 342. Given the broad discretion afforded to the Commission to "make ad hoc procedural rulings in specific instances," *FCC. v. Schreiber*, 381 U.S. 279, 289 (1965); *see also* 47 U.S.C. § 154(j) ("The Commission may conduct its proceedings in such manner as will best conduce to the proper dispatch of business and to the ends of justice."), we reject NHMC's challenge.

On this basis, we also conclude that the Commission did not abuse its discretion in denying INCOMPAS's motion to

"modify the protective orders" in four recent proceedings reviewing corporate transactions involving Internet service providers "to allow confidential materials submitted in those dockets to be used in this proceeding." *2018 Order* ¶ 324. The Commission declined to do so, noting that the protective orders assured the parties involved that the confidential materials would not be used in future proceedings. *Id.* ¶ 331. Moreover, the Commission explained that gathering this requested information would be "costly" and "administratively difficult" yet would only provide an "incomplete picture of industry practices" and would not "meaningfully improve the Commission's analysis." *Id.* ¶ 330, 329. Indeed, the Commission is "fully capable of determining which documents are relevant to its decision-making." *SBC Commc'ns Inc. v. FCC.*, 56 F.3d 1484, 1496 (D.C. Cir. 1995). Thus, in the absence of a more specific showing of relevance or prejudice arising from the agency's failure to consider, the Commission is not "bound to review every document." *Id.* We thus reject INCOMPAS's challenge.

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.* ¶¶ 195–196.

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. As the Commission confirmed at oral argument, it is not just a "heads up that ordinary conflict preemption principles are going to apply." Oral Arg. Tr. 171. The Order was meant to have independent and far-reaching preemptive effect from the moment it issued. *Id.*; *see also 2018 Order* ¶¶ 195–197. 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. Oral Arg. Tr. 171 (Q: "It's broader than ordinary conflict preemption?" A: "That's correct.").

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). That means that the Commission "may preempt state law only when and if it is

acting within the scope of its congressionally delegated authority." *Louisiana Pub. Serv. Comm'n v. FCC*, 476 U.S. 355, 374 (1986) ("*Louisiana PSC*"); *see also Comcast*, 600 F.3d at 654 (applying the "axiomatic principle that administrative agencies may act only pursuant to authority delegated to them by Congress") (formatting modified). Of course, if a federal law expressly confers upon the agency the authority to preempt, that legislative delegation creates and defines the agency's power to displace state laws. *FERC v. Mississippi*, 456 U.S. 742, 759 (1982) ("Insofar as [the statute] authorizes FERC to exempt qualified power facilities from 'State laws and regulations,' it does nothing more than pre-empt conflicting state enactments in the traditional way."); *cf. Wyeth v. Levine*, 555 U.S. 555, 576–577 & n.9 (2009) (declining to "defer[] to an agency's conclusion that state law is pre-empted" where "Congress ha[d] not authorized [the agency] to pre-empt state law directly," and collecting examples of statutes in which Congress had done so) (emphasis omitted).

By the same token, in any area where the Commission lacks the authority to regulate, it equally lacks the power to preempt state law. After all, an "agency may not confer power on itself," and "[t]o permit an agency to expand its power in the face of a congressional limitation on its jurisdiction would be to grant to the agency power to override Congress." *Louisiana PSC*, 476 U.S at 374–375; *see Public Serv. Comm'n of Md. v. FCC*, 909 F.2d 1510, 1515 n.6 (D.C. Cir. 1990) ("*Maryland PSC*") (recognizing that the Commission may not "regulate (let alone preempt regulation of) any service that does not fall within its * * * jurisdiction"). In other words, even "the allowance of 'wide latitude' in the exercise of delegated powers is not the equivalent of untrammeled freedom to regulate activities over which the statute fails to confer, or explicitly denies, Commission authority." *National Ass'n of*

Regulatory Util. Comm'rs v. FCC, 533 F.2d 601, 618 (D.C. Cir. 1976) ("*NARUC II*") (quoting *United States v. Midwest Video Corp.*, 406 U.S. 649, 676 (1972) (Burger, C.J., concurring)).

The Commission's regulatory jurisdiction falls into two categories. The first is the "express and expansive authority" Congress delegated in the Act to regulate certain technologies. *Comcast*, 600 F.3d at 645. This authority extends to "common carrier services, including landline telephony (Title II of the Act); radio transmissions, including broadcast television, radio, and cellular telephony (Title III); and 'cable services,' including cable television (Title VI)." *Id.* (internal citations omitted).

The second is the Commission's "ancillary authority." *Comcast*, 600 F.3d at 650. The Commission's ancillary authority derives from a provision within Title I of the Act that empowers the Commission to "perform any and all acts, make such rules and regulations, and issue such orders, not inconsistent with this chapter, as may be necessary in the execution of its functions." 47 U.S.C. § 154(i). That provision enables the Commission to regulate on matters "reasonably ancillary to the * * * effective performance of its statutorily mandated responsibilities." *American Library*, 406 F.3d at 692.

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 State of Cal. 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 691–692 (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*, 600 F.3d at 654 ("[I]t is Title II, III, or VI to which the authority must ultimately be ancillary."); *see also, e.g.*, *National Ass'n of Regulatory Util. Comm'rs v. FCC*, 880 F.2d 422, 429–431 (D.C. Cir. 1989) ("*NARUC-III*") (upholding the Commission's preemption of state "inside wiring" regulation as ancillary to its Title II authority over interstate telephone services); *Computer & Commc'ns Indus. Ass'n v. FCC*, 693 F.2d 198, 207, 218 (D.C. Cir. 1982) (upholding the Commission's preemption of certain state tariff regulations as ancillary to its Title II ratemaking power).

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") (emphasis in original).

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

Section 152 of the Communications Act provides, as relevant here, that "nothing in this chapter shall be construed to apply or to give the Commission jurisdiction with respect to * * * regulations for or in connection with intrastate communication service by wire or radio of any carrier." 47 U.S.C. § 152(b). That provision divides regulatory authority "into two separate components: interstate communications, which can be regulated by the [Commission]; and intrastate communications, which cannot." *Maryland PSC*, 909 F.2d at 1514 (internal quotation marks omitted). In doing so, Section 152 "severely circumscribes" the Commission's "power by 'fencing off from [its] reach or regulation intrastate matters,'" including "matters in connection with intrastate service." *Public Util. Comm'n of Tx. v. FCC*, 886 F.2d 1325, 1331 (D.C. Cir. 1989) (quoting *Louisiana PSC*, 476 U.S. at 370) (formatting modified).

Needless to say, "the realities of technology and economics" sometimes obscure the statute's "parceling of responsibility." *Louisiana PSC*, 476 U.S. at 360. The "impossibility exception" is a judicial gloss on Section 152 that attempts to help navigate the Act's sometimes complicated division of regulatory power.

The impossibility exception started with the Supreme Court's decision in *Louisiana PSC*. There, the Supreme Court rejected the Commission's attempt to preempt States from applying their own depreciation rules in setting intrastate telephone rates. The Commission had argued that the state rules impermissibly "frustrate[d]" the "federal policy of increasing competition in the industry." *Louisiana PSC*, 476 U.S. at 368, 369. The Supreme Court rejected that argument as driving outside the Commission's statutory lane. *Id.* at 369–370. But the Court also candidly acknowledged that "jurisdictional tensions may arise as a result of the fact that interstate and intrastate [telephone] service are provided by a single integrated system." *Id*. at 375. Because "Section 152(b) "constitutes * * * a congressional *denial* of power to the [Commission]," the Supreme Court explained, "we simply cannot accept an argument that the [Commission] may nevertheless take action which it thinks will best effectuate a federal policy." *Id*. at 374; *see also id.* at 370 ("We might be inclined to accept [the Commission's argument] were it not for the express jurisdictional limitations on [Commission] power contained in § 152(b)."); *id*. at 376 ("As we so often admonish, only Congress can rewrite this statute.").

Having rejected the Commission's preemption effort, the Supreme Court added a footnote distinguishing cases where lower courts had found it "*not* possible to separate the interstate and the intrastate components of the asserted [Commission] regulation." *Louisiana PSC*, 476 U.S. at 375 n.4 (citing *North*

Carolina Utils. Comm'n v. FCC, 537 F.2d 787 (4th Cir. 1976), and *North Carolina Utils. Comm'n v. FCC*, 552 F.3d 1036 (4th Cir. 1977)). And with that, the impossibility exception was born.

This court has applied the impossibility exception just once, in *Maryland PSC*, 909 F.2d at 1515. Drawing from *Louisiana PSC*, we held that the express denial of Commission authority codified in Section 152(b) does not apply where (i) "the matter to be regulated has both interstate and intrastate aspects"; (ii) "preemption is necessary to protect a valid federal regulatory objective"; and (iii) "state regulation would negate the exercise by the [Commission] of its own lawful authority because regulation of the interstate aspects of the matter cannot be 'unbundled' from regulation of the intrastate aspects." *Maryland PSC*, 909 F.2d at 1515 (formatting modified).

But *Maryland PSC* and the impossibility exception are of no help to the Commission. In applying the impossibility exception, *Maryland PSC* did not vitiate the need for either an express delegation of regulatory authority or ancillary authority. 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. *See Louisiana PSC*, 476 U.S. at 374; *Maryland PSC*, 909 F.2d at 1513–1515. If not, the matter falls within the States' jurisdiction. *Maryland PSC*, 909 F.2d at 1514. 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.

Nor can 47 U.S.C. § 152—the statutory hook for the impossibility exception—by itself provide a source of preemption authority. We have rejected that precise argument before. In *NARUC II*, *supra*, the Commission asserted that Section 152 authorized it to preempt state regulation of two-way communications over cable systems' leased access channels.[3] That argument failed, we explained, because "each and every assertion of jurisdiction over cable television must be independently justified as reasonably ancillary to the Commission's power over broadcasting." *NARUC II*, 533 F.2d at 612. So the Commission cannot bootstrap itself into preemption authority just by pointing to Section 152. It has to identify an independent source of regulatory authority to which the preemption action would be "reasonably ancillary." *Id.* (explaining that prior Supreme Court opinions "compel[] the conclusion that cable jurisdiction, which [the Court has] located primarily in § 152(a), is really incidental to, and contingent upon, specifically delegated powers under the Act") (citing *Southwestern Cable*, 392 U.S. at 178; and *Midwest Video*, 406 U.S. at 662–663); *see also Comcast*, 600 F.3d at 654 ("[I]t is Titles II, III, and VI that do the delegating."); *People of State of Cal.*, 905 F.2d at 1240 n.35 (recognizing that "Title I is not a source of regulatory authority").

All that is a long way of saying that, contrary to the Commission's argument, the "impossibility exception" does not create preemption authority out of thin air.

[3] This was before the Cable Communications Policy Act of 1984, Pub. L. No. 98–549, 98 Stat. 2279, established a national policy governing cable television.

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 PSC*, 476 U.S. at 374.

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, this is a "statement[] of policy," not a delegation of regulatory authority. *Comcast*, 600 F.3d at 652 ("The Commission acknowledges that section 230(b) * * * [contains] statements of policy that themselves delegate no regulatory authority."); *see also 2018 Order* ¶ 284 (characterizing Section 230(b) as merely "hortatory, directing the Commission to adhere to the policies specified in that provision when *otherwise* exercising our authority") (emphasis added); *id*. ¶ 267 ("We also are not persuaded that section 230 of the Communications Act is a grant of regulatory authority."). To put it even more simply, "[p]olicy statements are just that—statements of policy. They are not delegations of regulatory authority." *Comcast*, 600 F.3d at 654.

Nor do policy statements convey "statutorily mandated responsibilities" that the Commission may use to support an exercise of ancillary authority. *Comcast*, 600 F.3d at 644, 654 ("Although policy statements may illuminate [delegated] authority, it is Title II, III, or VI to which the authority must ultimately be ancillary."); *see also Motion Picture Ass'n of America v. FCC*, 309 F.3d 796, 806–807 (D.C. Cir. 2002) (rejecting the Commission's "argument that [its] video description rules are obviously a valid communications policy goal and in the public interest" because the Commission "can point to no statutory provision that gives the agency authority" to issue those rules).

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. *See* Governmental Pet'rs' Br. 43 (characterizing it as "limit[ing] only the agency's authority"); Commission Br. 128 n.38 (characterizing it as "a substantive limitation on government authority") (citing *Verizon*, 740 F.3d at 650).

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. *Id*. § 160(a).

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. *People of State of Cal.*, 905 F.2d at 1240 n.35.

The best the Commission can do is try to argue by analogy. It claims that it would be "incongruous" not to extend preemption authority under Title I, given that Section 160(e) prohibits States from regulating a service classified under Title II in instances of federal forbearance. Commission Br. 115–116.

That is a complaint that the Commission is free to take up with Congress. Until then, preemption authority depends on the Commission identifying an applicable statutory delegation of regulatory authority, and Section 160(e) does not provide it. The Commission's "own bruised sense of symmetry" is irrelevant. *NARUC II*, 533 F.2d at 614.

Anyhow, there is no such incongruity. By expressly requiring that communications services under Title II be regulated as common carriers, the Federal Communications

Act grants the Commission broad authority over services classified under Title II, unlike those classified under Title I. *See* 47 U.S.C. § 153(51); *Brand X*, 545 U.S. at 976; *Verizon*, 740 F.3d at 630; *Comcast*, 600 F.3d at 645. Which is also why the Act carves out more space for federal objectives to displace those of the States in the Title II context. *See* 47 U.S.C. § 253(a), (d) (expressly authorizing the Commission to preempt state or local regulations that "may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service[]").

The dissenting opinion calls this "a complete non sequitur," arguing that it "assumes an asymmetry in preemption implications" in which preemption protects "heavy-handed regulation" more than "light-touch regulation." Dissenting Op. 10 (emphasis omitted). Not so. The Commission could choose to enact heavier or lighter regulation under Title II by exercising less or more of its Title II forbearance authority, with symmetrical "preemption implications," *id*. It just cannot completely disavow Title II with one hand while still clinging to Title II forbearance authority with the other.

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). 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. 47 U.S.C. § 152(b).

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. Specifically, the Court "conclude[d] that the Commission is authorized under § 624(e) of the Cable Act"—authority expressly delegated in Title VI—"to pre-empt technical standards imposed by state and local authorities." *Id*. at 70 n.6. 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. *See, e.g.*, 47 U.S.C. § 1301(4) ("The Federal Government should also recognize and encourage complementary State efforts to improve the quality and usefulness of broadband data."); *id.* § 1302(a) (referring to "[t]he Commission and each State Commission with regulatory jurisdiction" in a chapter titled "Broadband"); *id.* § 1304 ("[e]ncouraging State initiatives to improve broadband"); *cf*. *id*. § 253(b) ("Nothing in this section shall affect the ability of a State to impose * * * requirements necessary to * * * protect the public safety and welfare, * * * and safeguard the rights of consumers."); *id*. § 254(i) ("The Commission and the States should ensure that universal service is available at rates that are just, reasonable, and affordable."). 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. *See* Commission Br. 130–133.

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. *Cf. City of New York*, 486 U.S. at 65–66 ("Since the Commission has explicitly stated its intent to * * * pre-empt state and local regulation, this case does not turn on whether there is an actual conflict between federal and state law.").

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). We have long recognized that "whether a state regulation unavoidably conflicts with national interests is an issue incapable of resolution in the abstract," let alone in gross. *Alascom, Inc. v. FCC*, 727 F.2d 1212, 1220 (D.C. Cir. 1984); *see also Time Warner Entertainment Co. v. FCC*, 56 F.3d 151, 195 (D.C. Cir. 1995) ("[T]he issue of whether the 1992 Cable Act preempts state negative option billing laws involves a host of factual questions peculiar to the state law at issue in each case.").

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*, 727 F.2d at 1220. 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.

The dissenting opinion, for its part, invents a brand new source of preemptive power that not even the Commission claims. Dissenting Op. 5–6, 9. The power to preempt is said to derive from *Chevron* deference and the "definitional ambiguity" that permits the Commission to classify broadband under Title I. *Id*. at 9; *see Chevron,* 467 U.S. 837. In the dissenting opinion's view, that interpretive ambiguity alone spawns a power to preempt with all the might of an express statutory grant of authority, and is singlehandedly capable of investing the Commission with the very state-law-displacing authority that the statute withheld in Section 152(b). That theory fails for four reasons.

First, this asserted legal basis for preemption is not before us. The 2018 Order offered two, and only two, sources of authority for the Preemption Directive: the impossibility exception and the federal policy of nonregulation for information services. 2018 Order ¶¶ 197–204 (discussing these sources under the heading "*Legal Authority*"). It did not advance *Chevron* Step Two as a source of preemption authority, so it cannot do so here for the first time. *See Chenery*, 318 U.S. at 87 ("The grounds upon which an administrative order must be judged are those upon which the record discloses that its action was based."); *Clean Air Council v. Pruitt*, 862 F.3d 1, 4, 9 (D.C. Cir. 2017) (per curiam) (holding that an agency could not invoke on appeal a source of authority for its action that it "did not rely on" when it acted); *Business Roundtable v. SEC*, 905 F.2d 406, 407–408, 417 (D.C. Cir. 1990) (holding that an agency's regulation exceeded its authority under the statutory provisions it invoked, and under *Chenery* "we cannot supply grounds to sustain the regulations that were not invoked by the [agency] below").

The Commission's brief here hewed to the 2018 Order, advancing the same "two independent bases of authority[,]" plus "ordinary principles of conflict preemption." Commisssion Br. 116–133 (asserting these bases under the heading "The *Order*'s Preemption Of Inconsistent State And Local Regulation Is Lawful"). Once again, the dissenting opinion's *Chevron* Step Two theory is not there. So it is forfeited. *See In re U.S. Office of Personnel Mgmt. Data Sec. Breach Litig.*, 928 F.3d 42, 71 (D.C. Cir. 2019) ("And KeyPoint has not raised a preemption argument in this court, so any argument to that effect is forfeited for purposes of this appeal."); *United States v. Gewin*, 759 F.3d 72, 87 n.2 (D.C. Cir. 2014) ("Gewin * * * forfeited that argument, however, by failing to discuss it in his briefing."). Of course, the Commission alluded to its *Chevron* Step Two interpretation in explaining its *policy* reasons for desiring categorical preemption. *See* 2018 Order ¶ 194; Commission Br. 115. But nowhere does it argue what the dissenting opinion does: that *Chevron* interpretive ambiguity provides an affirmative source of legal *authority* to preempt state laws.

Second, the dissenting opinion fails to explain how the Commission's interpretive authority under *Chevron* to *classify* broadband as a Title I information service could do away with the *sine qua non* for agency preemption: a congressional delegation of authority either to preempt or to *regulate*. Congress expressly "fenc[ed] off from [the Commission's] reach or regulation intrastate matters, * * * including matters in connection with intrastate service." *Louisiana PSC*, 476 U.S. 370 (internal quotation marks omitted). It is also Congress that chose to house affirmative regulatory authority in Titles II, III, and VI, and not in Title I. And it is Congress to which the Constitution assigns the power to set the metes and bounds of agency authority, especially when agency authority would otherwise tramp on the power of States to act

within their own borders. So to work here, the agency's interpretive authority would have to trump Congress's calibrated assignment of regulatory authority in the Communications Act.

But that cannot be right. No matter how desirous of protecting their policy judgments, agency officials cannot invest themselves with power that Congress has not conferred. *Louisiana PSC*, 476 U.S. at 374; *American Library*, 406 F.3d at 698. And nothing in *Chevron* rewrites or erases plain statutory text. *See Chevron*, 467 U.S. at 842–843 ("First, always, is the question whether Congress has directly spoken to the precise question at issue. If the intent of Congress is clear, that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress.").

The dissenting opinion invokes two cases discussing implied preemption arising from different agencies' decisions to forgo regulation under different statutory schemes. *See* Dissenting Op. 14–15. It first cites *Arkansas Electric Cooperative Corp. v. Arkansas Public Service Commission*, in which the Supreme Court observed that "a federal decision to forgo regulation in a given area *may* imply an authoritative federal determination that the area is best left unregulated." 461 U.S. 375, 384 (1983) (formatting modified). The Court went on to conclude that the relevant statute did not in fact imply such a determination, and so the state regulation at issue was not preempted. *Id*.

At best, *Arkansas Electric* sets up one version of the question. But it gets the dissent no closer to its preferred answer: that here, Congress delegated to the Commission the authority to give sweeping preemptive effect to whatever

policy determination underlay its *Chevron* Step Two interpretation of "offer," Dissenting Op. 5.

In the second case, *Ray v. Atlantic Richfield Co.*, the Supreme Court described the "pre-emptive impact" implied by the "failure of federal officials affirmatively to exercise their full authority" under a statute that the Court had already recognized as delegating regulatory power to the agency. 435 U.S. 151, 174, 177–178 (1978) (formatting modified) ("We begin with the premise that the Secretary has the authority to establish 'vessel size and speed limitations.'") (cited at Dissenting Op. 14–15).

Those cases do nothing to empower the Commission to engage in *express* preemption in the 2018 Order. *See* Oral Arg. Tr. 171 (Commission: "No, Your Honor, it's express preemption."). In neither case was the source or existence of statutory authority for the agency to preempt state regulation at issue. Nor do those cases speak to a statutory scheme in which Congress expressly marked out a regulatory role for States that the federal agency has attempted to supplant. If Congress wanted Title I to vest the Commission with some form of Dormant-Commerce-Clause-like power to negate States' statutory (and sovereign) authority just by washing its hands of its own regulatory authority, Congress could have said so.

Third, the dissenting opinion's effort to discern Congress's delegation of preemption authority in *Chevron* and *Brand X* does not work either. The dissenting opinion acknowledges that its theory of *Chevron* preemption authority derives entirely from the "ambiguity in the word 'offer,'" Dissenting Op. 5, a word that is buried in a definitional section in a non-regulatory part of the statute, 47 U.S.C. § 153(53).

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. *Brand X*, 545 U.S. at 996–997; *see Chevron*, 467 U.S. at 860–862 (reading a statutory gap as indicating a congressional delegation of power to an agency to fill it). 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. *See Chevron*, 467 U.S. at 842–844.

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. Dissenting Op. 6. 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.

The Supreme Court has made very clear that *Chevron* does not have that much muscle. Congress, the Court has explained, "does not alter the fundamental details of a regulatory scheme," let alone step so heavily on the balance of power between the federal government and the States, "in vague terms or ancillary provisions—it does not, one might say, hide elephants in mouseholes." *Whitman v. American Trucking Ass'ns*, 531 U.S. 457, 468 (2001).

And that principle is a well-settled limitation on *Chevron*. *See*, *e.g.*, *King v. Burwell*, 135 S. Ct. 2480, 2495 (2015) (quoting *Whitman*, 531 U.S. at 468); *Gonzales v. Oregon*, 546 U.S. 243, 267 (2006) (same); *see also Natural Res. Def. Council v. EPA*, 661 F.3d 662, 664–665 (D.C. Cir. 2011); *American Chemistry Council v. Johnson*, 406 F.3d 738, 743 (D.C. Cir. 2005) ("Congress does not generally hide elephants in mouseholes, and we think it utterly improbable that [Congress intended to authorize the EPA's interpretation] by creating a list of several hundred toxic chemicals.") (internal citation omitted). The mousehole, in short, cannot be the wellspring of preemption authority that the Commission needs. Doubly so here, where the Supreme Court has specifically held that the Commission's desire to "best effectuate a federal policy" must take a back seat to Section 152(b)'s assignment of regulatory authority to the States. *Louisiana PSC*, 476 U.S. at 374.

Anyhow, the argument that the Commission needs to save its classification decision from becoming "meaningless," Dissenting Op. 23, still does not work. If the Commission can explain how a state practice actually undermines the 2018

Order, then it can invoke conflict preemption.[4] If it cannot make that showing, then presumably the two regulations can co-exist as the Federal Communications Act envisions, 47 U.S.C. § 152(b). What matters for present purposes is that, on this record, the Commission has made no showing that wiping out *all* "state or local requirements that are inconsistent with the [Order's] federal deregulatory approach" is necessary to give its reclassification effect. *2018 Order* ¶ 194. And binding Supreme Court precedent says that mere worries that a policy will be "frustrate[d]" by "jurisdictional tensions" inherent in the Federal Communications Act's division of regulatory power between the federal government and the States does not create preemption authority. *Louisiana PSC*, 476 U.S. at 370, 375.

For those same reasons, the dissenting opinion's concern that "the most draconian state policy trumps all else," Dissenting Op. 1, is a straw man. In vacating the Preemption Directive, we do not consider whether the remaining portions of the 2018 Order have preemptive effect under principles of conflict preemption or any other implied-preemption doctrine. Much like the dissenting opinion's effort to wring out of *Arkansas Electric* and *Ray* a source of preemption authority, the dissenting opinion's suggestion that the court's decision leaves no room for implied preemption confuses (i) the scope of the Commission's authority to expressly preempt, with (ii) the (potential) implied preemptive effect of the regulatory choices the Commission makes that are within its authority.

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[4] *See Williamson v. Mazda Motor of America, Inc.*, 562 U.S. 323, 330 (2011) (conflict preemption wipes out "state law that stands as an obstacle to the accomplishment and execution of the [federal law's] full purposes and objectives") (internal quotation marks omitted).

Fourth, the dissenting opinion's reliance on the Eighth Circuit's opinion in *Minnesota Public Utilities Commission v. FCC* ("*Minnesota PUC*"), 483 F.3d 570 (8th Cir. 2007), is misplaced. That opinion enumerated the discrete questions it purported to answer—none of which was whether Congress delegated to the Commission the authority to preempt. *Id*. at 577. The Eighth Circuit decided only whether the Commission's order was "arbitrary and capricious because it * * * determined it was impractical or impossible to separate the intrastate components of VoIP service from its interstate components," or because it "determined state regulation of VoIP service conflicts with federal regulatory policies." *Id*. This set of inquiries does not resolve the purely legal question of the source of the Commission's asserted preemption authority here.

The dissenting opinion concedes that point. Dissenting Op. 18 (acknowledging that "legal authority * * * was not formally at issue"). The dissent nevertheless suggests that the Eighth Circuit's decision upholding as neither arbitrary nor capricious the Commission's finding of "the facts essential for application of the impossibility exception" implies that, had that court actually considered the question whether the Commission had the legal authority to preempt, it would have disagreed with us. *Id.* at 17–18. But the Eighth Circuit's silence on that question leaves us with nothing to answer.

* * * * *

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, *2018 Order* ¶¶ 194–204. 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, 150–151 (D.C. Cir. 1993); *see also Heartland Regional Med. Ctr. v. Sebellius*, 566 F.3d 193 (D.C. Cir. 2009) (analyzing the *Allied-Signal factors*).

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. *See Susquehanna Int'l Grp., LLC v. SEC*, 866 F.3d 442, 451 (D.C. Cir. 2017) ("[T]he SEC may be able to approve the Plan once again, after conducting a proper analysis on remand."); *see also Black Oak Energy, LCC v. FERC.*, 725 F.3d 230, 244 (D.C. Cir. 2013) (remanding without vacatur where it was "plausible that FERC can redress its failure of explanation on remand while reaching the same result"). 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, *see 2018 Order* ¶¶ 194–204, 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 id.* ¶ 194.

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

So ordered.

MILLETT, *Circuit Judge*, concurring:

I join the Court's opinion in full, but not without substantial reservation. The Supreme Court's decision in *National Cable & Telecommunications Ass'n v. Brand X Internet Services*, 545 U.S. 967 (2005), 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.

We have held before, as we do again today, that under the Supreme Court's decision in *Brand X*, "classification of broadband as an information service *was permissible*." *USTA v. FCC*, 825 F.3d 674, 704 (D.C. Cir. 2016) (emphasis added). That is because the Supreme Court "made clear" in *Brand X*, "over and over[,] that the [Communications] Act left [classification] to the agency's discretion." *USTA v. FCC*, 855 F.3d 381, 384 (D.C. Cir. 2017) (Srinivasan and Tatel, JJ., concurring in the denial of rehearing *en banc*); *see, e.g.*, *Brand X*, 545 U.S. at 992 ("[T]he statute fails unambiguously to classify the telecommunications component of cable modem service as a distinct offering[]," and "[t]his leaves federal telecommunications policy in this technical and complex area to be set by the Commission, not by warring analogies[.]"); *id.* at 996–997 ("silence suggests * * * instead that the Commission has the discretion to fill the consequent statutory gap").

But that was then, and this is now. *Brand X* was decided almost fifteen years ago, during the bygone era of iPods, AOL, and Razr flip phones. The market for broadband access has changed dramatically in the interim. *Brand X* faced a "walled garden" reality, in which broadband was valued not merely as a means to access third-party content, but also for its bundling of then-nascent information services like private email, user

newsgroups, and personal webpage development. Today, none of those add-ons occupy the significance that they used to. Now it is impossible "to deny [the] dominance of [third-party content] in the broadband experience." *USTA*, 825 F.3d at 698. "[C]onsumers use broadband principally to access third-party content, *not* [ISP-provided] email and other add-on applications." *Id.* (emphasis added). In a nutshell, a speedy pathway to content is what consumers value. It is what broadband providers advertise and compete over. And so, under any natural reading of the statute, the technological mechanism for accessing third-party content is what broadband providers "offer."

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.

I

A

The Commission's latest reclassification decision reinterprets the Communications Act, and so the statutory text and structure are where I begin. *See Ross v. Blake*, 136 S. Ct. 1850, 1856 (2016).

The Act divides the world of relevant technologies into two buckets: "information services" subject only to minimal regulation, and "telecommunications services" subject to the common carriage requirements of Title II. "Information service" is defined as "the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications." 47 U.S.C. § 153(24). "Telecommunications," in turn, is "the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received." *Id.* § 153(50). And "telecommunications service" means "the offering of telecommunications for a fee directly to the public * * * regardless of the facilities used." *Id.* § 153(53).

A telecommunications carrier is "treated as a common carrier" subject to Title II "to the extent that it is engaged in providing telecommunications services." 47 U.S.C. § 153(51). Title II requires, among other things, that telecommunications carriers charge just, reasonable, and nondiscriminatory rates, *see id.* §§ 201(b), 202(a), and design their systems so that other carriers can interconnect with their networks, *see id.* § 251(a).

To be sure, these regulatory enhancements need not always run with the Title II classification. The Commission is specifically directed to "forbear from applying" common carrier regulations whenever forbearance "is consistent with the public interest,'' 47 U.S.C. § 160(a)(3), and enforcement is "[un]necessary" to either "protect[]" consumers or ensure "just and reasonable" rates, *id.* § 160(a)(1)–(2). In making that public interest assessment, the Commission must consider "whether forbearance * * * will promote competitive market conditions" that reduce rates and improve product quality. *Id.* § 160(b). In other words, even when the Commission elects

the Title II common-carrier pathway, serving the "public interest" remains the touchstone.

B

In *Brand X*, the Supreme Court held that the key statutory term "offering" in the definition of "telecommunications service" is ambiguous in the following respect. *Brand X*, 545 U.S. at 989. What a company "offers," according to *Brand X*, can refer to either the "single, finished product" *or* the product's "individual components." *Id.* at 991. Resolving that question in the context of broadband service required the Commission to determine whether broadband's data-processing and telecommunications components "are functionally integrated * * * or functionally separate," *id.*, and, relatedly, "what the consumer perceives to be the integrated finished product," *id.* at 990. According to *Brand X*, those questions "turn[] not on the language of [the Communications] Act, but on the factual particulars of how Internet technology works and how it is provided, questions *Chevron* leaves to the Commission to resolve in the first instance." *Id.* at 991.

Brand X recognized that "telecommunications"—in the form of a "physical connection" between the providers' computers and end users' computers, *Brand X*, 545 U.S. at 1009 (Scalia, J., dissenting)—"was one necessary component" of broadband service. *See id.* at 978–979, 988, 990 (majority opinion). But given the Commission's definition of the word "offering," the key question was whether that transmission component was sufficiently independent to amount to a "stand-alone" offering. *See id.* at 988–989. At *Chevron*'s second step, the Court deferred to the Commission's finding that "the high-speed transmission used to provide [the information service] is a functionally integrated component of [an information] service[.]" *Id.* at 998.

Based on the technological realities of the time, the Supreme Court held that the Commission reasonably concluded in 2002 that the "data transport" aspect of broadband was "inextricably intertwined" with information service capabilities like DNS, caching, "Usenet newsgroups," and ISP-provided email, so that, together, they formed just one "single, integrated" offering. *See Brand X*, 545 U.S. at 977–979, 987–990.

As today's opinion explains, we are bound to uphold the Commission's classification because it hewed closely to the portions of *Brand X* that discuss DNS and caching as information services. *2018 Order* ¶ 33; *see id.* ¶ 33 n.99 (recognizing other functionalities, but only by way of footnote, with no elaboration, and deeming them non-"determinative"). In the 2018 Order, the Commission describes DNS as "indispensable to ordinary users as they navigate the Internet," and it claims "the absence of ISP-provided DNS would fundamentally change the online experience for the consumer." *Id.* ¶ 34. The Commission then largely duplicates *Brand X's* discussion of caching, albeit with some additional technical detail. *Id.* ¶ 41. It concludes that they are "functions provided as part and parcel of" broadband, *id.* ¶ 42, and should be "understood as part of a single, integrated information service offered by ISPs," *id.* ¶ 50; *see also id.* ¶ 33.

Brand X allows that approach. The Supreme Court picked out DNS and caching to explain why the consumer continues to make use of a functionally integrated information service, even when she "goes beyond [the walled garden] and accesses content provided by third parties other than the cable company[.]" *Brand X*, 545 U.S. at 998; *id.* at 998–1000; *see also 2018 Order* ¶ 34. In so doing, the Supreme Court implied that DNS and caching were themselves information services. *See id.* at 998–1000.

From our limited institutional perch as a lower court, that conclusion controls our decision. "[W]e must follow the binding Supreme Court precedent." *We the People Found., Inc. v. United States*, 485 F.3d 140, 145 (D.C. Cir. 2007).

II

The Supreme Court, however, is not so constrained. It is freer than we are to conclude that the "factual particulars of how Internet technology works," *Brand X*, 545 U.S. at 991, have changed so materially as to undermine the reasonableness of the agency's judgments and in particular its "determinative" reliance on DNS and caching, *2018 Order* ¶ 33 n.99. Or Congress could bring its own judgment to bear by updating the statute's governance of telecommunications and information services to match the rapid and sweeping developments in those areas. Either intervention would avoid trapping Internet regulation in technological anachronism.

A

The Commission's decision to cling to DNS and caching as the acid test for its regulatory classification "cannot bear very much reality."[1] Today, the typical broadband offering bears little resemblance to its *Brand X* version. The walled garden has been razed and its fields sown with salt. The add-ons described in *Brand X*—"a cable company's e-mail service, its Web page, and the ability it provides consumers to create a personal Web page," 545 U.S. at 998—have dwindled as consumers routinely deploy "their high-speed Internet connections to take advantage of competing services offered by third parties." *Title II Order* ¶ 347. That is why the

[1] T.S. Eliot, *Burnt Norton*, *in* FOUR QUARTETS 1, 4 (1943).

Commission today makes no effort to rely on those ancillary services. *2018 Order* ¶ 33 n.99.

In fact, the significance of the walled garden is likely what led the *Brand X* challengers to effectively concede, and likely what led the Supreme Court to accept, that information services like email, newsgroups, caching, and DNS were sufficiently significant to define the overall "offering" and, thus, to control the classification decision. The only question was whether those services were sufficiently integrated with transmission to constitute a single offering. *Brand X*, 545 U.S. at 987–988. But such musings about the technological realities that seemingly informed a Supreme Court decision alone cannot license this court to disregard *Brand X* as binding precedent. *See Dronenburg v. Zech*, 741 F.2d 1388, 1392 (D.C. Cir. 1984) ("[W]e doubt that a court of appeals ought to distinguish a Supreme Court precedent on the speculation that the Court might possibly have had something else in mind.").[2]

With the Commission now having abandoned its reliance on any additional technologies provided by broadband, *see 2018 Order* ¶ 33 n.99, the question is whether the combination of transmission with DNS and caching *alone* can justify the information service classification. If we were writing on a clean slate, that question would seem to have only one answer given the current state of technology: No. *Cf. Brand X*, 545 U.S. at 990 ("[C]able companies providing Internet service *do not 'offer' consumers DNS*, even though DNS is essential to providing Internet access.") (emphasis added). Not only does the walled garden lay in ruin, but the roles of DNS and caching themselves have changed dramatically since *Brand X* was

[2] To be clear, I agree fully with the majority that *Brand X* did not assess the "relative importance" of the data-processing and transmission components of cable modem. Majority Op. 42.

decided. And they have done so in ways that strongly favor classifying broadband as a telecommunications service, as Justice Scalia had originally advocated. *Brand X*, 545 U.S. at 1012–1014 (Scalia, J., dissenting).

DNS, much like email, is now free and widely available to consumers in the Internet marketplace. As explained in the Title II Order, "the factual assumption that DNS lookup necessarily is provided by the broadband Internet access provider is no longer true today." *Title II Order* ¶ 370. OpenDNS was founded in 2006, just one year after *Brand X* was decided, with the mission of providing "a recursive DNS service for use at home." *About Us*, OpenDNS, https://www.opendns.com/about (last visited July 30, 2019). Google followed suit in 2010, rupturing the DNS status quo and rendering free third-party DNS a seamless reality for interested consumers. Google, *Introducing Google Public DNS*, Google Official Blog (Dec. 3, 2009), https://googleblog.blogspot.com/2009/12/introducing-google-public-dns.html.

By 2015, OpenDNS and Google were processing over 180 billion queries *every day*. *Title II Order* ¶ 370 n.1046. As the Title II Order recognized, "Internet users are free to use the DNS provider of their choice, and switching between them does not require altering any aspect of the Internet access service itself. Users need only quickly update a single setting in their operating system's Internet preferences to point DNS requests to another server." *Id.* (quoting CDT Comments at 14). Today, with a menu of more than twenty third-party providers of free DNS, *cf.* J.A. 2214–2215, many millions of Internet users have simply discarded the Commission's North Star—ISP-provided DNS. *Cf. 2018 Order* ¶ 34 n.109.

As for caching, Petitioners explain—and the Commission does not dispute—that it does not work when users employ encryption. Mozilla's Br. 46–47; *see 2018 Order* ¶ 42 n.147; J.A. 2182–2184. And encrypted traffic has "increased from just 2% in 2010 to more than 50% in 2017." *2018 Order* ¶ 42 n.147 (quoting ACLU/EFF Reply).

The Commission's answer is that encryption is "not yet *ubiquitous*," and that "many sites still do not encrypt." *2018 Order* ¶ 42 n.147 (emphasis added) (quoting *Protecting the Privacy of Customers of Broadband and Other Telecommunications Services, Report and Order*, 31 FCC Rcd. 13911, 13922, ¶ 34 (2016), *nullified by* Pub. L. No. 115-22, 131 Stat. 88 (2017)). But that response concedes that caching no longer enjoys the pride of place ascribed to it by the Supreme Court in 2005. *See* Mozilla's Br. 46–47. Whether or not encryption is "truly" "ubiquitous" is entirely beside the point, *2018 Order* ¶ 42 n.147. Caching is no longer even dominant.

These new factual developments call for serious technological reconsideration and engagement through expert judgment. Instead, the Commission's exclusive reliance on DNS and caching blinkered itself off from modern broadband reality, and untethered the service "offer[ed]" from both the real-world marketplace and the most ordinary of linguistic conventions.

B

The structure of the Communications Act fortifies this conclusion. The Act announces a clear intention to regulate market dynamics and to correct for the problems of monopoly power in the telecommunications industry. *See* 47 U.S.C. § 160(b) (directing the Commission to consider "whether forbearance [from common carriage regulations] will promote

competitive market conditions"); *id.* § 572(a) (prohibiting carriers from "purchas[ing] or otherwise acquir[ing] directly or indirectly more than a 10 percent financial interest, or any management interest, in any cable operator providing cable service within the local exchange carrier's telephone service area"); *id.* § 548(a) (aiming to "promote the public interest, convenience, and necessity by increasing competition and diversity in the multichannel video programming market"). Hence, the Commission's reasonable decision to define "functional equivalent" in 47 U.S.C. § 332(d)(3) in terms of market "substitutability." *2018 Order* ¶ 85.

These structural considerations ought to weigh heavily in classifying what it is that broadband providers truly "offer" in the marketplace. The Commission's analysis should key to the *value* added to the consumer—and any monopoly rents it might enable—rather than to any tagalong item that happens to promote its policy preferences. In this case, the central and valued "offer" is transmission—technologically taking the user to and from third-party information providers. To construe and apply the term as the Commission has, divorced from basic market realities, is tantamount to "perform[ing] *Hamlet* without the Prince"— understanding and applying the key statutory term without regard for the statute's internal logic and purposes, *USTA*, 825 F.3d at 749 (Williams, J., concurring); *see also Verizon v. FCC*, 740 F.3d 623, 661–662 (2014) (Silberman, J., concurring) (emphasizing that the Act is designed to combat the monopolistic nature of the telecommunications market).

C

The parties also debate the "telecommunications management exception." 47 U.S.C. § 153(24) (excluding from an "information service" "any use [of an information service]

for the management, control, or operation of a telecommunications system or the management of a telecommunications service"). As Justice Scalia explained in *Brand X*, that exception may well support excluding broadband from the information service category. *See Brand X*, 545 U.S. at 1012–1013 (Scalia, J., dissenting) (arguing that DNS "is scarcely more than routing information, which is expressly excluded from the definition of 'information service'") (citing 47 U.S.C. § 153(20)). The Commission's two major Orders in this area—the Title II Ord*er* and the 2018 Order—labor at length to reconcile their preferred classifications with the text and history of the telecommunications management exception. *Compare Title II Order* ¶ 356, *with 2018 Order* ¶ 36.

But ambiguity in the telecommunications management exception does not mean that anything goes. Ambiguity alone is virtually never enough to sustain agency action. *See Brand X*, 545 U.S. at 985 (asking whether the agency has "*reasonabl[y]*" filled the textual gap). Here, as the court's opinion recognizes, the exception is fluid by design—it operates as a means of catching data-processing tools that are, at most, incidental to the core transmission service.

So when framed in *Chevron*'s terms, the Commission faced a choice between classifying the combination of transmission and DNS/caching as an integrated "information service" offering, or classifying that package as a telecommunications service, with DNS/caching falling within the telecommunications management exception. In my view, the reasonableness of *that choice* should turn, at least in part, upon the "relative importance" of the different capabilities in the marketplace. So, while the two sides argue at length over whether functions like DNS and caching should fall within the exception, the important analytical work should really occur at the antecedent step when deciding whether the transmission

element is so dominant that it would be unreasonable not to apply the exception to DNS and caching. If precedent did not dictate otherwise, the answer to that antecedent inquiry would put DNS and caching squarely into the telecommunications management exception.

III

According to the Commission, even putting *Brand X* aside, broadband is an information service for a new reason—one that is immune to changes in the "factual particulars of how Internet technology works and how it is provided." *Brand X*, 545 U.S. at 991. Broadband connection is an information service, the Commission tells us, because it is "designed and intended" with the "fundamental purpose[]" of facilitating access to *third-party information services*. *2018 Order* ¶ 30. In other words, in the Commission's view, broadband itself need not include any data processing at all to satisfy the information-service definition. It is enough that broadband is a designated transmission pathway to third-party content—that is, that it "has the capacity or potential ability to be used to engage in the activities within the information service definition[.]" *Id*.

That move is incompatible with *Brand X*, the basic mechanics of Title II, and the texts of the relevant definitional provisions.

For starters, the Commission's novel interpretation effectively abrogates the *Brand X* blueprint. *Brand X* prized above all else "consumer perce[ption]" and "functional[] integration," leaving those inquiries to the Commission's technocratic judgment. *Brand X*, 545 U.S. at 990–991. But if the Commission is right today, and pure data transmission is an information service just because its "purpose" is to facilitate access to other information services, then there would be no

combination of services left for expert technical analysis. "The entire question," *Brand X* tells us, "is whether the products here are functionally integrated (like the components of a car) or functionally separate (like pets and leashes)." *Brand X*, 545 U.S. at 991. The Commission's approach abandons that test by simply redesignating the transmission component itself as also an information service.

The problems with the Commission's position do not stop there. As numerous commenters warned, the Commission's capacious view of "information service" would imperil the one proposition on which everyone has so far been able to agree: traditional telephony belongs within Title II. That worrisome implication suggests the Commission has drifted far beyond the statutory design and exceeded its interpretive discretion.

To appreciate why, consider the most ordinary uses of telephone and broadband service. Both enable casual conversation—whether via a traditional phone call or voice-over-Internet protocol. Both also provide the user access to a wealth of information (in the form of automated information systems or websites). *See* Amicus Br. of Members of Congress at 21–22 (citing the example of "Julie," Amtrak's automated reservation service). And because these overlapping functions are non-accidental (*i.e.*, by "design"), presto: the old touchtone phone is now immune from common-carriage regulation.

That definition, though, would render Title II an empty basket. Nothing of any meaning would be left to qualify as a telecommunications service. *See Mackey v. Lanier Collection Agency & Serv., Inc.*, 486 U.S. 825, 837 (1988) ("[W]e are hesitant to adopt an interpretation of a congressional enactment which renders superfluous another portion of that same law.").

The Commission says it has "*always* understood traditional telephone service 'to provide basic transmission—a fact not changed by its incidental use, on occasion, to access information services.'" FCC's Br. 34 (emphasis added) (quoting *2018 Order* ¶ 56). But that response avoids the key question: Whether the Commission's *new* position can be squared with what it has always understood. Historically, the Commission has viewed telephony as pure transmission because that is exactly what it is. Any information services—from directory assistance to automated ordering systems—to which the phone provided access were never thought to bear upon telephony's classification status as a telecommunications service, and not an information service.

At least not until now. The Commission's novel and utterly capacious definition of information services as just providing the user transmissive access to information requires that it contend with the traditional use of telephones "to generate, acquire, store, transform, process, retrieve, utilize, and make available information." *2018 Order* ¶ 56. An announced fealty to prior agency practice is no help when the whole question is whether the new approach imperils the foundation of that pedigree.

The Commission's position fares no better when measured against the text of the statute. The Commission claims broadband offers the relevant "capabilities" of an information service because it is "designed" or "intended" to achieve the "fundamental purpose[]" of acquiring and retrieving information. *2018 Order* ¶ 30. But those purposive qualifiers are nowhere to be found in the statutory text.

The Commission's position also requires it to carve out an unenumerated exception to the statute's straightforward definition of "telecommunications service."

"Telecommunications service" is "the offering of telecommunications"—that is, "the transmission, between or among points specified by the user, of information of the user's choosing, without change in [its] form or content," 47 U.S.C. § 153(50)—"for a fee directly to the public," *id*. § 153(53). On the Commission's view, a telecommunications pathway that is "designed" to facilitate information acquisition and manipulation does not meet the telecommunications definition and is instead an information service. *2018 Order* ¶ 56 (distinguishing broadband from a telecommunications service because it is "*designed* * * * to electronically create, retrieve, modify and otherwise manipulate information").

The problem is the statute does not include a *mens rea* "design" exception. Presumably because every transmission pathway is designed on some level to acquire and retrieve data. What would be the point of transmission otherwise? So following the Commission's view to its logical conclusion, everything (including telephones) would be an information service. The only thing left within "telecommunications service" would be the proverbial road to nowhere.

So, in addition to upending the only fixed point in our post-*Brand X* world (that is, traditional telephony as a telecommunications service), the Commission's position treats the statutory text as an afterthought. Yet agencies are not supposed to "rewrite clear statutory terms to suit [their] own sense of how the statute should operate." *Utility Air Regulatory Grp. v. EPA*, 134 S. Ct. 2427, 2446 (2014).

* * * * *

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, 237 (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 *National Cable & Telecommunications Ass'n v. Brand X Internet Services*, 545 U.S. 967 (2005), 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. (It is an "exception" to 47 U.S.C. § 152(b)'s otherwise existing barrier to Commission jurisdiction over any charges, etc., "in connection with *intrastate* communication service by wire or radio of any carrier" (emphasis added).) 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).

Prong (1) is obviously satisfied, and petitioners bring no challenge under prong (2)—that "preemption is necessary to protect a valid federal regulatory objective," or the all-important final part of prong (3)—that "regulation of the interstate aspects of the matter cannot be 'unbundled' from regulation of the intrastate aspects." *Id*. 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:

> Because both interstate and intrastate communications can travel over the same Internet connection (and indeed may do so in response to a single query from a consumer), it is impossible or impracticable for ISPs to distinguish between intrastate and interstate communications over the Internet or to apply different rules in each circumstance. Accordingly, an ISP generally could not comply with state or local rules for intrastate communications without applying the same rules to interstate communications. Thus, because any effort by states to regulate intrastate traffic would interfere with the Commission's treatment of interstate traffic, the first condition for conflict preemption is satisfied.

2018 Order ¶ 200. Although petitioners posed objections to such findings before the agency, they make none here, despite the high bar our cases set for the agency on such issues. See, e.g., *Nat'l Ass'n of Regulatory Util. Comm'rs v. FCC*, 880 F.2d 422, 430 (D.C. Cir. 1989) (stating that "a valid FCC preemption order must be limited to [activities] that would *necessarily* thwart or impede the operation of a free market in the [relevant area]" (emphasis added)). Thus the proposition that disallowance of preemption would thoroughly frustrate the application of the Commission's decision is uncontested.

Nor is the preemptive language broader than the Commission has historically used in exercising impossibility preemption. See, e.g., *Second Computer Inquiry, Memorandum Opinion and Order*, 84 F.C.C. 2d 50 ¶ 155 (1980) ("While this requirement may impair the states' ability to establish charges for intrastate service, we have imposed it only to best implement our jurisdiction under Sections 1 and 2(a) over interstate service. When the exercise of our jurisdiction over interstate services requires the imposition of requirements for unbundling and nonusage sensitive charges, however, inconsistent state regulations must yield to preeminent claims of the federal regulatory scheme.").

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 Fed. Sav. & 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, exemplified by *City of New York v. FCC*, 486 U.S. 57 (1988). There the Court found that Congress had empowered the FCC to adopt a prophylactic rule preempting state attempts to impose on certain cable operators "more stringent" technical standards than those imposed by the Commission, *id*. at 63, regardless of "whether . . . an actual conflict" existed between the state standards and any federal law or regulation, *id*. at 65-66. The Court located that broad pre-emptive authority in § 624(e) of the Cable Act, 47 U.S.C. § 544(e) (1982), *id*. at 70 n.6, even though that section said nothing about preemption. It rested the inference on the fact that "[w]hen Congress enacted the Cable Act [of 1984] . . . it acted against a background of federal pre-emption on [the cable standards] issue." *Id.* at 66. As we shall see, the background of pre-1996 preemption provides less obvious and emphatic support; only one decision,

California v. FCC, 39 F.3d 919 (9th Cir. 1994), expressly rested on the Commission's interest in protecting the open market in services under Title I from state or local frustration. See below, pp. 16–17. Nonetheless, the statute, its history and its interpretation give ample reason to infer a congressional intent that the Commission be authorized to preempt state laws that would make it "impossible or impracticable" (see ¶ 200, above) for ISPs to exercise the freedom that the Commission meant to secure by classifying broadband under Title I.

We start with *Chevron*'s understanding that where "Congress has explicitly left a gap for the agency to fill, there is an express delegation of authority." *Chevron, U.S.A., Inc. v. Nat'l Res. Def. Council, Inc.*, 467 U.S. 837, 843–44 (1984). "Sometimes the legislative delegation to an agency on a particular question is implicit rather than explicit." *Id*. at 844. In the case of the 1996 Act, via ambiguity in the word "offer," see *Nat'l Cable & Telecomm. Ass'n v. Brand X Internet Servs.*, 545 U.S. 967, 989–92 (2005), Congress implicitly delegated to the FCC the power to determine whether to locate broadband under Title II, where it would be potentially subject to the full gamut of regulations designed for natural monopoly, or under Title I, which itself authorizes virtually no federal regulation. (An exception is 47 U.S.C. § 257, which though located in Title II was expressly written to apply to all of Chapter 5, which encompasses Titles I through VI.) All members of the panel agree that here as in *Brand X* the Commission lawfully placed broadband service under Title I of the 1996 Act and lawfully rejected placing it under Title II.

The consequences of the Commission's choice of Title I depend on its having authority to preempt. One possible outcome is that the choice did little more than flick the federal regulatory switch into the off position, with narrow exceptions such as authority under § 257, which the Commission has exercised to assure transparency in ISP behavior. On that view,

the Commission's choice of Title I essentially turned the field over to states and localities, leaving each free to select as prescriptive control over broadband as it might think best. Of course the individual state or locality, if inclined to a genuinely light-touch regime, would have to face the reality that the Commission addressed in ¶ 200 of the *Order*, quoted just above. Just as an ISP cannot "comply with state or local rules for intrastate communications without applying the same rules to interstate communications," it seems safe to say that an ISP bound to apply the rules of California to any of its service will also need—because of the impossibility of "distinguish[ing] between intrastate and interstate communications over the Internet," *2018 Order* ¶ 200—to apply those heavy-handed rules to *all* its service.

The other possible outcome is that the congressional grant of power to choose Title I entailed Commission authority to choose a genuinely light-touch *national* regime—for all broadband in the United States. On this view, the choice of Title I, coupled with preemption of inconsistent state and local regulation, allows establishment of a genuinely federal policy for broadband, with service based primarily on consumer and provider response to market forces.

Under the first view, the feds step aside and leave the matter to the states (or, more realistically, to the most ardently regulatory state). Under the second, federal law adopts a nationwide regime governed primarily by market forces.

As Congress did not specifically grant or withhold preemption authority in the context of Title I, we must look for other clues. The strongest (invoked by the Commission, see *2018 Order* ¶ 204) is the provision flat-out preempting state authority to enforce any of the Title II provisions "that the Commission has determined to forbear from applying." 47 U.S.C. § 160(e). Within the Title II realm, the statute

automatically requires state congruence with the Commission's choices as to regulatory stringency (at least to the extent that choices are made by forbearance or refraining from forbearance). As the Commission exercises discretion to go down the scale of dirigisme, Congress requires the states to trail along.

Yet petitioners tell us not only that *mandatory* state congruence collapses automatically once the Commission steps off the Title II escalator and chooses Title I, but that the Commission is left with *no authority* to make its policy choice a national one. Such a view would put the Commission in paradoxical bind. The Commission could create an effective federal policy controlling communications brought under Title II, within a considerable range of intrusiveness, but if it finds the light-touch associated with Title I more apt, it then de facto yields authority over interstate communications to the states.

Of course this inference from statutory forbearance preemption automatically encounters the maxim *expressio unius est exclusio alterius*: Congress's direction of preemption for all lawful exercises of forbearance from Title II authority, with no parallel provision for the Commission's choice of Title I, might be taken to exclude any preemption once the Commission chooses Title I (putting aside preemption aimed at maintaining the effectiveness of regulation under Title II, see *Comcast Corp. v. FCC*, 600 F.3d 642, 654 (D.C. Cir. 2010)).

Such a congressional intent seems improbable. First, the *expressio unius* maxim doesn't really fit: § 160(e) operates to preempt as a matter of law, whereas here we are talking of whether the Commission has a discretionary choice to preempt. The existence of an orange doesn't imply the absence of an apple. Second, under *Brand X*'s reading of the 1996 Act, we have to infer a congressional belief that the very light touch associated with Title I would be a reasonable Commission

choice. But we also know that Congress wanted a Commission choice among fine gradations of regulatory intrusiveness to be applied nationally (to the extent necessary for it to apply fully to all interstate communications)—by granting the forbearance power in Title II, coupled with automatic preemption. Accepting the *expressio unius* argument requires us to think that Congress intended to suspend Commission authority to implement its policy choice nationally just at the point where the agency's findings in favor of deregulation cease to be achievable under the combination of Title II-plus-forbearance.

This dilemma would disappear if the Commission could move down the forbearance escalator under Title II to a point very close to the ultra-light-touch of Title I. But it can't. No Commission, however intellectually gifted, could write an order explaining (a) why Title II was suitable because of serious market failures requiring corrective government action under its grants of authority, and simultaneously (b) why it was exercising its authority to forbear from exercising all those authorities. Section 160(a), after all, requires that in exercising forbearance the Commission determine that enforcement of the provision at issue isn't necessary to assure that rates are just and reasonable, or for the protection of customers, and that forbearance is consistent with the public interest. It would be a neat trick to explain how the "difficult policy choices" that *Brand X* said "agencies are better equipped to make than courts," 545 U.S. at 980, called for the imposition of Title II and—simultaneously—for forbearance from all its actual authorities. Under petitioners' view, as a practical matter, a Commission could create a *national* light-touch regime only by choosing a place on the escalator (materially more dirigiste than is implicit in Title I) where it could deftly but persuasively reconcile Title II with substantial forbearance. 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.

The improbable idea that Commission development of a national telecommunications policy can occur only within the constraints of Title II would especially surprise the 1996 Act's joint House-Senate conference committee. In introducing the Act, the committee explained that it was "to provide for a *pro-competitive, de-regulatory national* policy framework." S. REP. NO. 104-230, at 1 (1996) (Conf. Rep.) (emphasis added). On petitioners' view, the committee indulged in a massive self-contradiction: The policies allowed by the bill could be deregulatory, or national, but not both—at least not beyond such deregulation as the Commission could coherently fit under Title II.

In the end the 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. Suppose that the statute, instead of delegating authority to choose between the two titles via definitional ambiguity, had said bluntly, "The Commission shall in its reasonable discretion choose between applying the regulatory scheme applicable under Title II and the one applicable under Title I." And the Commission had responded by saying it chose the scheme available under Title I, offering as reasons the sort of policy analysis that it did here. Would any of the cases rejecting agency preemption efforts bar a Commission order preempting types of state regulation that would defeat the purposes the Commission invoked in its decision to place broadband under Title I?

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.* 133. 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). See *Maj. op.* 123 ("[I]n any area where the Commission lacks the authority to regulate, it equally lacks the

power to preempt state law."); *id*. at 128 ("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."); *id*. at 132 ("[P]reemption authority depends on the Commission identifying an applicable statutory delegation of regulatory authority . . . ."); *id*. at 134 (concluding that courts cannot evaluate if Congress provided preemption authority "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"); *id*. at 138 ("[T]he dissenting opinion fails to explain how the Commission's interpretive authority under *Chevron* to *classify* broadband as a Title I information service could do away with the *sine qua non* for agency preemption: a congressional delegation of authority either to preempt or to *regulate*"). 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.

I must speak of "the broad form" of the maxim because the majority offers two variations. Most take the broad form—denying *any* possibility of preemption in the absence of affirmative regulatory authority. But two expressions of the maxim are accompanied by an acknowledgement that Congress itself can allow such preemption with *express* statutory language. *Id.* at 123, 138. Thus even the narrow form tacks on a self-made and unexplained requirement that any such congressional decision can have legal effect *only* if it is *express*, despite our living in a world where judicial interpretation of statutes rarely insists on an express provision outside the context of a clear statement rule or its equivalent. This narrow version of the maxim, however, appears to be entirely the majority's handiwork and to rest entirely on its premise of asymmetry.

The majority's acknowledgment of congressional authority is necessary. Congress plainly has power itself to preempt state regulation interfering with the flow of market forces in a specified domain, without having regulated or afforded an agency parallel affirmative regulatory authority. See, e.g., 49 U.S.C. § 41713(b)(1) (preempting states from regulating airline prices and routes to protect the deregulation of the airline industry from state interference). The same principle undergirds a congressional choice (express or implied) to grant an agency equivalent preemptive authority without any parallel federal regulation (by Congress or a federal agency). See 47 U.S.C. §§ 253 (a), (d) (preempting and authorizing agency preemption of state and local regulations that "may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service").

Further, the majority's maxim is *inapplicable*. There is no doubt whatsoever that on December 13, 2017, the day before adoption of what we call the *2018 Order*, the Commission had authority to apply Title II to broadband. By its classification decision, it forswore any *current* intention to use Title II vis-à-vis broadband. But the authority to reclassify broadband back under Title II, and thus to subject it to all the authorities granted under Title II, remained. Under the 1996 Act the Commission's choice not to exercise a power is not a permanent renunciation of that power.

We see this rather obviously in relation to forbearance. When the Commission adopted the *Title II Order* it also elected to forbear from a slew of the powers available under Title II. But everyone recognized that these forbearance decisions were reversible at the Commission's election, plus, of course, its satisfying the usual requirements for regulatory change, most obviously those of *FCC v. Fox Television Stations, Inc.*, 556 U.S. 502 (2009). There are two ways of characterizing the

period of forbearance-and-preemption between the two orders: One could view the accompanying preemption (executed by Congress itself) either as explicit provision for preemption accompanying an *absence of regulatory power* (anathema to the majority), or as preemption accompanying the Commission's reserved, latent regulatory authority (thereby satisfying the majority's maxim). Either way, the current situation is parallel: Because preemption is necessary to make the agency's lawful exercise of power effective, it accompanies the agency decision to hold its Title II powers over broadband in abeyance.

The majority assumes without explanation that in allowing the Commission a choice between full-throttled regulation under Title II and very light regulation under Title I Congress had *no interest* in making sure that the Commission could, if it exercised the latter choice, establish an effective *national* broadband policy (applying directly to interstate communications and indirectly to intrastate regulations to the extent that it was impossible to distinguish between intrastate and interstate communications, i.e., to the extent that it was called for by the familiar impossibility exception). I can see no basis for imputing such an outlook to Congress.

The Supreme Court has clearly ruled that authority to preempt may be inferred to support an agency's regulatory scheme. In *City of New York*, as we've seen, the Court found that Congress had empowered the FCC to preempt state attempts to apply more stringent technical standards than those imposed by the Commission, regardless of any conflict between the federal and state standards. 486 U.S. at 63, 65-66. (That decision was under a statute enacted against a background of parallel Commission preemption, an issue I'll take up below at pp. 15–17.)

Similarly, the Court has said that a "federal decision to forgo regulation in a given area may imply an authoritative federal determination that the area is best left *un*regulated, and in that event would have as much pre-emptive force as a decision *to* regulate." *Arkansas Electric Co-op. Corp. v. Arkansas Public Service Comm'n*, 461 U.S. 375, 384 (1983); see *2018 Order* ¶ 194 & n.726. The majority points out that the Court found the statute at issue did not, in fact, "imply an authoritative federal determination that the area is best left unregulated," 461 U.S. at 384 (or, as here, a congressional delegation to the agency of authority to make that choice). But the reason for this does nothing to undermine the relevance of *Arkansas Electric*. The Federal Power Commission had determined as a jurisdictional matter that *another agency* had "exclusive authority" over rural power cooperatives, so that it in fact had no occasion to "determine that, as a matter of policy, rural power cooperatives that are engaged in sales for resale should be left unregulated." *Id.* The FCC's choice of Title I in the *2018 Order* was of course *exactly* a determination that broadband should be left free of the burdens of Title II.

And in *Ray v. Atlantic Richfield Co.*, 435 U.S. 151, 178 (1978), the Court held that "the Secretary [of Transportation]'s failure to promulgate a ban on the operations of oil tankers in excess of 125,000 [deadweight tons] [a ceiling that the State of Washington purported to impose] . . . takes on . . . [the] character" of a ruling "'that no such regulation is appropriate'" and thus "States are not permitted to use their police power to enact such a regulation" (quoting *Bethlehem Steel Co. v. N.Y. State Labor Relations Bd.*, 330 U.S. 767, 774 (1947)). The majority brushes *Ray* aside because, while the Court blessed agency preemption, it had made an antecedent finding that the statute in question "delegat[ed] regulatory power to the agency," that is, power to make rules concerning vessel sizes and speeds. *Maj. op.* 140. But the Court's relevant decision was that the statute contemplated "a single decisionmaker" on

the regulation of supertankers, 435 U.S. at 177, just as, given the historic use of the "impossibility exception," it is a safe conclusion that the 1996 Act contemplated "a single decisionmaker" for interstate services located under Title I, protected from state interference to the extent necessary for its effectiveness, e.g., where, as the Commission found here, "an ISP generally could not comply with state or local rules for intrastate communications without applying the same rules to interstate communications." *2018 Order* ¶ 200.

I mentioned above that pre-1996 exercises of preemptive authority by the Commission have generally not rested (or at least have not rested exclusively) on an implication of power from the Commission's election to place services under Title I and concomitant power to keep states from thwarting the Commission's adoption of an ultra-light-touch regulatory policy. The reason is fundamentally that the Commission, in implementing its decisions to remove certain services from Title II, namely customer premises equipment ("CPE") and "enhanced services" (the precursor of information services), has been able to rely on authority ancillary to Title II. Thus in *Computer II* it required AT&T to offer enhanced services and CPE only through a separate subsidiary and required all common carriers to unbundle charges for CPE from their charges for telecommunications services. *Second Computer Inquiry, Final Decision*, 77 F.C.C. 2d 384 ¶¶ 9, 12 (1980); *Second Computer Inquiry, Memorandum Opinion and Order*, 84 F.C.C. 2d at ¶ 66. We upheld these requirements in *Computer & Communications Industry Ass'n v. FCC*, 693 F.2d 198 (D.C. Cir. 1982) ("*CCIA*"), resting on the Commission's interest in preventing cross-subsidization of the competitive services with revenue from the common carrier services. These requirements at once enabled the Commission to prevent distortion of the free market for enhanced services and CPE by carriers' revenue from monopoly services, *id*. at 211, and to protect consumers of the monopoly services from higher rates

on those services (that's the source of the revenue for cross-subsidization), *id*. at 213. In *Comcast*, we expressly tethered this exercise of power to the Commission's role in protecting the consumers of monopoly services. 600 F.3d at 655-56.

CCIA also upheld the Commission's preemption of any state inclusion of CPE charges in their tariffs for monopoly communications services (a similar preemption to assure structural separation for enhanced services went unchallenged), resting on the Commission's exercise of ancillary power to ban the unbundling. 693 F.2d at 214–18. Thus the preemptions under *Computer II* raised no question entirely dependent on the authority of the Commission to protect its choice of non-regulation for the services newly removed from Title II. Similar reasoning governed our approval of the Commission's preemption of any state failure to remove "inside wiring" from common carrier tariffs. *National Ass'n of Regulatory Commissioners v. FCC*, 880 F.2d 422 (D.C. Cir. 1989).

When the Commission in *Computer III* reversed its position on structural separation, requiring its *elimination* for the Bell Operating Companies that succeeded AT&T, its preemption of contrary state common carrier rules could have been sustained on the same basis. *California v. FCC*, 39 F.3d 919, 923–25, 931–33 (9th Cir. 1994); see also *California v. FCC*, 905 F.2d 1217, 1243 (9th Cir. 1990). Nonetheless—and quite logically, because the Commission's *Computer III* preemption rested in part on the Commission's interest in assuring fair competition in the rising enhanced services market located under Title I, *California*, 39 F.3d at 924—the 9th Circuit decision upholding preemption went further. It noted petitioner State of New York's claims "that the FCC may preempt state action only when it is acting pursuant to specified regulatory duties under Title II of the Act," and that "no preemption authority exists" when "the FCC's action is intended to implement the more general goals of Title I." *Id.* at

932. It responded unequivocally, "This position must be rejected." *Id*.; see also *2018 Order* ¶ 198 & n.738; FCC Br. at 119.

Apart from the 9th Circuit's 1994 *California* decision, this pre-1996 litigation doesn't offer affirmative support for the inference of authority to preempt state regulation rendering impossible its achievement of a deregulatory regime for Title I services. But no case has *rejected* that inference—an entirely reasonable inference, in my view, for the reasons set out above. The majority appears to believe that the cases above reinforce its notion that an agency can exercise preemption *only* in support of currently deployed affirmative regulatory authority, *Maj. op.* 125, but the cases hold no such thing. All could uphold the Commission in reliance on its Title II authority. It is striking, however, that in 1994 in *California* the 9th Circuit went farther and rested expressly on the Commission's power to protect the unregulated market in enhanced services, created by locating such services under Title I, which the *Computer III* decision had sought to protect.

In addition to *California* (1994), a post-enactment circuit court decision touches on Commission authority to preempt state regulations inconsistent with the Commission's deregulatory regime for broadband. In *Minnesota Public Utilities Commission v. FCC*, 483 F.3d 570 (8th Cir. 2007), the Eight Circuit upheld an FCC order preempting state regulation of VoIP under the impossibility exception even *before* the agency had decided whether to classify VoIP as an information service or a telecommunications service. The agency rested on its view that the matter turned only on the practical issues revolving around the impossibility exception—whether separating the intrastate and interstate aspects of the service was possible or not. The answer in its view would not depend on the classification. *Id*. at 578.

As the majority points out, legal authority (as opposed to the facts essential for application of the impossibility exception) was not formally at issue. But the court's idea of what a "conflict" might be is radically different from the majority's here. In upholding the FCC's assertion of irreconcilable conflict *if* it later chose to classify VoIP as an information service, the court pointed to the agency's "long-standing," "market-oriented policy" of "nonregulation of information services" and upheld the FCC's bottom line: "[A]ny state regulation of an information service conflicts with the federal policy of nonregulation." *Id*. at 580. The decision seems wholly incompatible with the majority's idea that there is no Commission preemptive authority vis-à-vis a service located under Title I (with the narrow exception of regulatory authority expressly made applicable to Title I, such as that of § 257).

The majority says the agency did not adequately flesh out these arguments in the *2018 Order* or in its briefing here. Flattered as I am at the thought that I deserve credit for all or most of the thinking in this opinion, it isn't so.

As I do, the *2018 Order*'s section on preemption views the Commission as adopting an affirmative "federal regulatory regime" of deregulation, a regulatory regime that can *only* find its roots in the Commission's authority to classify the Internet under Title I or Title II. *2018 Order* ¶ 194; see also, e.g., *id*. (describing a "federal regulatory scheme"). As I do, the *2018 Order* argues that this "affirmative policy of *de*regulation is entitled to the *same* preemptive effect as a federal policy of regulation." *Id*. ¶ 194 (second emphasis added). The *2018 Order* also highlights the incongruity between finding an implied preemptive power when the Commission adopts an intrusive Title II regime but not when it adopts a national deregulatory framework. See *Id*. ¶ 204 ("It would be incongruous if state and local regulation were preempted when

the Commission decides to forbear from a provision that would otherwise apply, or if the Commission adopts a regulation and then forbears from it, but not preempted when the Commission determines that a requirement does not apply in the first place."). It thus directly assails the key asymmetry on which the majority's opinion entirely depends—the notion that for affirmative regulation, preemptive power may be implied, but for a lawfully adopted deregulatory regime it must be stated by Congress expressly. And as I do, the *2018 Order* notes that "no express authorization or other specific statutory language is required for the Commission to preempt state law." *Id.* ¶ 204 & n. 749 (citing *City of New York v. FCC*, 486 U.S. 57 (1988)). To continue would tax the reader's patience, but the similarities do not end there. No matter how you slice it, the Commission rejected—and asserted ample grounds for doing so—the majority's novel notion that for an intrusive regulatory regime an agency's preemptive power can be inferred, while a deregulatory regime is a Cinderella-like waif, and can be protected from state interference only if Congress expressly reaches out its protective hand.

Moreover, even if the Commission had not laid this foundation below, the majority is mistaken in its assumption that our obligation to "judge the propriety of [agency] action solely by the grounds invoked by the agency," *Sec. & Exch. Comm'n v. Chenery Corp.*, 332 U.S. 194, 196 (1947) (*Chenery II*); see also *Sec. & Exch. Comm'n v. Chenery Corp.*, 318 U.S. 80, 87 (1943) (*Chenery I*), prevents our independent analysis of the legal issues undergirding preemptive authority. *Chenery* prevents a court from upholding agency action based on "*de novo* factual findings or independent policy judgments better left to agency experts." *Sierra Club v. Fed. Energy Regulatory Comm'n*, 827 F.3d 36, 49 (D.C. Cir. 2016); see *Canonsburg Gen. Hosp. v. Burwell*, 807 F.3d 295, 305 (D.C. Cir. 2015). But that principle does not apply when the issue turns on a purely legal question, such as, here, "our interpretation of [a statute]

and binding Supreme Court precedent." See *Sierra Club*, 827 F.3d at 49.

Nor do the majority's concerns about the Commission's briefing hold water. The Commission noted that it had substituted "a light-touch regulatory regime under Title I for the utility-style Title II regulations that had been adopted in 2015," and that this light-touch regime could only survive if it preempted state law. FCC Br. 111. The Commission noted that its authority to classify supplied authority to preempt. See *id*. at 115 ("[T]o the extent the Commission could have read any ambiguous provisions of the Communications Act to give it authority to retain the former rules [i.e., persist in wielding the regulatory authorities supplied by Title II], the Commission's decision not to do so . . . supports preemption of state or local efforts to reinstate those requirements."). On appeal, as in the *2018 Order*, the Commission attacked the conclusion "that the Commission's determination that broadband Internet access is an information service . . . deprived it of the power to preempt contrary state regulations." *Id*. at 124. And the Commission argued that its "federal decision to deregulate preempts contrary state regulatory efforts just the same as a federal decision to regulate," *id.* at 130—again an assault on the linchpin of the majority's ruling: asymmetry. It would be the height of formalism to fault the Commission because, despite making all the correct moves, it didn't precisely enough (at least for the majority) articulate the link between its authority to adopt a deregulatory regime under Title I and its implied power to protect that regime.

Towards the end, though never acknowledging the Commission's finding that an internet service provider "generally could not comply with state or local rules for intrastate communications without applying the same rules to interstate communications," *2018 Order* ¶ 200, the majority hints that through case-by-case litigation of conflict

preemption, the Commission might be able over the years to obtain relief against some state impositions of regulation inconsistent with the Commission's deregulatory scheme. *Maj. op.* 142–43 & n.4.

Though the majority never says so as explicitly, some of its concern appears to stem from the preemption directive's scope—its painting with (as they see it) too broad a brush. See, e.g., *id*. at 135. I disagree that the *2018 Order* sweeps too broadly; tellingly, the majority offers no examples of possible state rules, preempted by the *Order*'s language, that would not thwart the Commission's policy objectives. Even if it did, though, that is no reason to vacate the operative portion of the order now. Rather, we should wait until a concrete case of alleged overreach presents itself, at which point the party adversely affected by preemption of the state law may challenge the preemption directive as applied in that case. See *Weaver v. Fed. Motor Carrier Safety Admin.*, 744 F.3d 142, 145 (D.C. Cir. 2014) ("[W]hen an agency seeks to apply the rule, those affected may challenge that application on the grounds that it conflicts with the statute from which its authority derives." (quotation omitted)).

In any event, the majority's view of preemption seems to render any conflict unimaginable (other than a conflict with the Commission's affirmative exercise of authority under § 257). In the majority view, preemption is utterly dependent on the Commission's affirmative regulatory authority and cannot depend on its authority to apply a deregulatory regime to broadband. Although the majority says that "conflict preemption" can apply against a state law that "stands as an obstacle to the accomplishment and execution of the [federal law's] full purposes and objectives," *Maj. op.* 143 n.4, this would be of no use to the Commission: The majority rejects the idea that the Commission has exercised authority as to which, say, California's enforcement of a Title II equivalent

could "stand[] as an obstacle." In the majority's view, when the Commission adopts a deregulatory regime under Title I, there's no there there.

Similarly, the majority's suggestion that it isn't *really* eviscerating the *2018 Order*—it says a Commission explanation of "how a state practice actually undermines the *2018 Order*" would enable it to invoke conflict preemption, *Maj. op.* 142–43—magically coexists with its complete disregard of the Commission's explanation in ¶ 200 of the way contrary state regulation would be impossible to exclude from the interstate market, and with California's legislation adopting an equivalent of Title II (see p. 1 above). 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 (indeed the Commission's "jurisdiction," but see 47 U.S.C. § 152(a)) depends either on the Commission's "express and expansive authority" "to regulate certain technologies," *Maj. op.* 124, 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.* 124, 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.

* * *

I pause to make an entirely unrelated observation. The petitioners advance a bevy of attacks against the Commission's conclusion that the market for broadband internet is fairly competitive—attacks that the majority correctly dismisses. See Part V.B.2. But the Commission's case is stronger than the majority lets on: The petitioners never contest the Commission's findings on market concentration as measured by the familiar HHI for residential fixed broadband service. *2018 Order* ¶ 132. Even the HHI for the fastest speed category (25 Mbps down and 3 Mbps up) "meets the Department of Justice . . . designation of 'moderately concentrated'" (2,208, with the DOJ range being 1500 to 2500). *2018 Order* ¶ 132 & n.478. Those findings, which though doubtless subject to contextual analysis have gone uncriticized by petitioners, seem highly relevant and deserving of mention.

* * *

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 *Order* by leaving all broadband subject to state regulation in which the most intrusive will prevail, see above pp. 1, 2–3, 5–6, 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.