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# COMMUNICATIONS LAW AND POLICY

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CHAPTER 1

POWER

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**p.30, add at the end of the dagger footnote (re *Chevron*):**

The Supreme Court recently added that *Chevron* deference also applies to an agency's interpretation of a statutory ambiguity regarding its own jurisdiction. See *City of Arlington, TX v. FCC*, 133 S. Ct. 1863 (2013).

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**CHAPTER 2****ENTRY**

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**p.102, replace first ¶ with:**

*The wireless terrain today.* According to the FCC, at the end of 2011, there were 298.3 million subscribers of mobile telephony services.<sup>\*</sup> This widespread penetration has encouraged households to drop wireline telephony: approximately 34% of all households had wireless telephony only.<sup>†</sup> As of August 2013, there were four mobile telephone operators with nationwide coverage: AT&T Inc.; Verizon Wireless, LLC<sup>‡</sup>; Sprint Nextel Corp.<sup>§</sup>; and T-Mobile US.<sup>\*\*</sup> (Smaller regional service providers include: US Cellular and Leap Wireless.<sup>††</sup>) In terms of market share as measured by percentage of service revenues, in 2012 Q2, Verizon earned 34.3%, AT&T 32.3%, Sprint Nextel 15.8%, and T-Mobile 9.7%.<sup>‡‡</sup> The FCC estimates that 93.2 % of the US population live in census blocks that offer 4 or more mobile telephony providers.<sup>§§</sup>

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<sup>\*</sup> See Sixteenth Report, *Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services, Including Commercial Mobile Services*, 28 FCC Rcd. 3700, 3708 (2013).

<sup>†</sup> *Id.* at 3724.

<sup>‡</sup> Verizon Wireless is a joint venture, 55% owned by Verizon Communications, Inc. and 45% owned by Vodafone Group PLC.

<sup>§</sup> Sprint Nextel was created from the merger of Sprint Corp. and Nextel Communications, Inc. In July 2013, SoftBank (a Japanese corporation) acquired Sprint Nextel.

<sup>\*\*</sup> T-Mobile US is a wholly-owned subsidiary of Deutsche Telekom AG. In March 2011, AT&T announced its acquisition of T-Mobile, but ran into FCC skepticism, which led the parties to end the proposed transaction by December. T-Mobile then bought MetroPCS, which was one of the largest regional service providers. The merger completed in May 2013.

<sup>††</sup> In 2013, AT&T announced its purchase of Leap Wireless, a smaller regional service provider.

<sup>‡‡</sup> See 16<sup>th</sup> Report, Table 12.

<sup>§§</sup> See *id.* at Table 7.

**p.117, insert new Note between Notes 6 and 7 and renumber accordingly:**

7. *Economic incentives.* According to the FCC, in 2013 dollars, collocation costs a carrier an average of \$25,000 to \$30,000. By contrast, building a new tower is approximately ten times more expensive.\* Does this suggest that when a carrier insists on a new tower, it must have good reason?

**p.117 bottom, insert new Note 9:**

9. *More Congressional attention.* In the Middle Class Tax Relief and Job Creation Act of 2012,<sup>†</sup> Congress made modification of existing antennas and collocation easier: “Notwithstanding section 704 of the Telecommunications Act of 1996 (Public Law 104-104) or any other provision of law, a State or local government may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station.” 47 U.S.C. § 1455(a)(1). Per the statute, these “eligible facilities request” specifically include collocation, removal of equipment, and replacement of transmission equipment. *See id.* at § 1455(a)(2). The FCC is currently conducting a rulemaking that, among other things, interprets the various terms of this statute.

**pp.125-26, replace text starting with “AWS (Advanced Wireless Services)” up to “Notes & Questions”:**

*AWS-1 (Advanced Wireless Services).* In the Commercial Spectrum Enhancement Act of 2005,<sup>‡</sup> Congress transferred spectrum in the 1.7 GHz and 2.1 GHz regions from federal users (such as the Department of Defense) to commercial services. Ninety MHz of spectrum was auctioned off in 2006, and raised \$13.7 billion. Big winners included T-Mobile, Verizon, SpectrumCo (Sprint’s joint venture with various cable companies), and MetroPCS. The

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\* See 16<sup>th</sup> Report, 28 FCC Rcd. 3700, ¶ 331.

† Middle Class Tax Relief and Job Creation Act of 2012, Pub.L. 112–96, 126 Stat. 156 (Feb. 22, 2012).

‡ Pub L No 108-494, Title 2 (2004) (amending 47 USC § 923).

spectrum has subsequently been resold to various parties and is currently being used to provide 3G/4G services.

*700 MHz band auction.* In March 2008, the FCC raised \$19.6 billion by auctioning off the 700 MHz band (698-806 MHz), which is “beachfront property” returned by television broadcast licensees after their conversion from analog to digital transmissions. (This band has excellent propagation characteristics compared to higher frequencies.) Winning bidders have used this spectrum to provide 4G services. Two aspects of this auction are noteworthy.

First, the FCC tried to create a private/public partnership to build out a national public safety network (“Block D”). A “private” commercial licensee would be entrusted to build out an adjacent “public” safety network operated by a single National Public Safety Broadband Licensee. What would be the incentive? Because the “private” licensee would be able to enjoy secondary access to all that public safety spectrum, as long as public safety communications were granted priority. No bidder met the reserve price of \$1.33 billion. Accordingly, the FCC went back to the drawing board on what to do with this leftover spectrum and the need for a national public safety communications system.\* In February 2012, Congress passed the Middle Class Tax Relief and Job Creation Act of 2012,<sup>†</sup> which created the First Responder Network Authority (FirstNet), an independent authority within the National Telecommunications & Information Administration, which operates within the Department of Commerce. The Act assigned the 700 MHz D Block to FirstNet in order to establish “a nationwide, interoperable public safety broadband network.”<sup>‡</sup>

Second, a 22 MHz band (“Block C”) was auctioned with certain “open access” requirements: licensees must allow customers to use any device or application of their choice (sometimes called “no locking, no blocking”). Google

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\* In the meantime, the FCC has granted conditional waivers to 21 public safety entities who sought to deploy networks on the public safety spectrum. In order to ensure interoperability, the FCC has mandated the 4G technology of LTE. See 3<sup>rd</sup> R&O & 4<sup>th</sup> NPRM, *In the Matter of Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band*, 26 FCC Rcd 733 (January 25, 2011).

<sup>†</sup> Middle Class Tax Relief and Job Creation Act of 2012, P.L. 112-96, § 6204.

<sup>‡</sup> Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, PS Docket No. 12-94, DA 12-1462, Report and Order (PSHSB, adopted September 7, 2012).

had prominently urged for greater openness, including a wholesale requirement, but the Commission declined to go that far. We will closely examine the policy significance of “open access” or “net neutrality” in CHAPTER 7: ACCESS, *infra*. What result? Verizon won the license, with the bid of \$9.63 billion.

*More auctions to come.* Everyone agrees that more spectrum is necessary in response to the explosion in mobile Internet devices, such as smart phones and tablets. (We will be formally introduced to the Internet, its technology, and regulation starting in CHAPTER 4: BAD CONTENT.) According to some estimates, mobile data traffic in North America will increase from 20 to 45 times between 2009 and 2014.\* In its 2010 NATIONAL BROADBAND PLAN, the FCC called for a whopping 500 more MHz to be made available within the next decade.† Since more spectrum can’t be manufactured, there are only a few possible strategies. First, the federal government is moving spectrum that was previously allocated to the government into the commercial zone. That’s what explains, for example, the spectrum that was freed up for the 2006 AWS auction, discussed above.

Second, the government is trying to persuade current licensees to relinquish voluntarily bandwidth that they don’t really need. TV broadcasters in the UHF Band (600 MHz) are the prime target. The idea is to create *incentive auctions* in which their channels can be auctioned off to new mobile licensees in exchange for the broadcasters receiving a cut of the profits.‡ Of course, it’s technically possible for the FCC to reclaim unused spectrum through various legal procedures. However, given the political clout of spectrum owners, the government is hoping to get buy-in from the broadcasters through financial incentives.

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\* See FCC, CONNECTING AMERICA: THE NATIONAL BROADBAND PLAN 76 Exhibit 5-A (2010).

† *Id.* at 75.

‡ See *id.* at 81-82.

In the Middle Class Tax Relief and Job Creation Act of 2012, Congress gave the FCC specific authority to conduct incentive auctions.\* The FCC is currently engaged in a rulemaking to create the procedures by which that auction will be held, with the goal of conducting the auction sometime in 2014.† These auctions raise complex and challenging questions because they will, for the first time, combine a *reverse auction* (to set the price at which broadcasters will voluntarily relinquish their licenses) and the traditional *forward auction* (to set the price at which mobile companies will buy licenses). Broadcasters who sell their licenses will have the option to go off the air entirely, share a channel with another broadcaster (since 6 MHz is plenty of bandwidth to broadcast multiple channels), or move from the VHF spectrum down to the UHF spectrum band. Finally, broadcasters can simply choose to opt out and not participate in the incentive auction at all, which means that the spectrum freed up will not be geographically uniform given different numbers of holdouts in different territories.‡ In June 2014, the FCC issued a Report and Order establishing the basic framework for the incentive auction but has not yet determined the detailed auction procedures.§

**p.139, replace Note 4a with:**

4. *Commons.*

a. *Current assignment practices.* As the Report suggests, leaving spectrum in some form of commons is not entirely new. In the first part of this chapter, we focused on licenses assigned individually to a unique party—the case of the broadcaster or mobile telephony operator. But certain frequency bands have historically been licensed more lightly. For example, under Part 97 of the

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\* See 47 U.S.C. § 309(j)(8)(G).

† See NPRM, *Expanding the Economic and Innovations Opportunities of Spectrum through Incentive Auctions*, 27 FCC Rcd. 12357 (2013).

‡ See generally FCC Staff Summary, *The Broadcast Television Spectrum Incentive Auction: Innovation in Policy to Ignite Innovation for Consumers and Business*, available at <[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DOC-318455A1.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-318455A1.pdf)>.

§ See R&O & FNPRM, *Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions*, FCC 14-50 (rel. June 2, 2014).

FCC's rules, amateur radio operators do need an individual license but they can receive one simply by passing an examination.\* Under Part 95, other services, such as CB (citizens band) radio are "licensed by rule" to an entire class, for collective use.† This sort of licensing is specifically authorized in 47 U.S.C. § 307(e).

47 U.S.C. § 307(e) Operation of certain radio stations without individual licenses

(1) Notwithstanding any license requirement established in this chapter, if the Commission determines that such authorization serves the public interest, convenience, and necessity, the Commission may by rule authorize the operation of radio stations without individual licenses in the following radio services: (A) the citizens band radio service . . .

(3) For purposes of this subsection, the terms "citizens band radio service", "radio control service" . . . shall have the meanings given them by the Commission by rule.

Finally, some uses of spectrum do not require a license at all. Consider, for example, the ubiquitous 802.11 "Wi-Fi" networks, as well as cordless phones, garage door openers, and remote controls. Instead of obtaining a license, the individual devices need only comply with 47 C.F.R. Part 15, which allows use of particular frequencies at low power so as to minimize interference.

**pp.140-43, replace Note 6 with:**

6. *Toward private property.* Since the 2002 Report, the FCC has pursued various elements of both the exclusive use and commons model. If it's really my "property," I should be able to lend it to someone if I'm not using it. For instance, if I have a guest house that's not being used, shouldn't I be able to rent it out and make some money? One could ask the same question about un-

\* See generally 47 C.F.R. Part 97 ("Amateur Radio Services"); § 97.17 ("Application for new license grant").

† See 47 C.F.R. Part 95 ("Personal Radio Service"); § 95.404 ("You do not need an individual license to operate a CB station. You are authorized by this rule to operate your CB station in accordance with the rules in this subpart.").

derused spectrum. Historically, the FCC has been wary of such leases, and demanded separate approval for any such transfers of spectrum.\* However, since 2003, the FCC has sought to develop *secondary markets*, in which original licensees can more easily lease out spectrum as long as they continue to exercise some control.†

### 7. *Towards Commons.*

a. *Smarter spectrum devices and use.* Soon after the Spectrum Policy Task Force Report, the Commission pursued various proceedings on interference temperature,‡ cognitive radio,§ and ultrawideband (which the Spectrum Report referenced repeatedly as part of a potential *underlay* for current spectrum assignments).\*\* But then the FCC started to get cold feet about “thinking smart.” For example, in 2007, the FCC terminated its interference temperature proceeding, without prejudice on the substantive merits.†† The reason? The Commission suggested that commenters generally thought the proposal unworkable and that the technical record had grown stale.

b. *More “lightly licensed” spectrum: Part 90 Subpart Z.* In 2005, the FCC authorized nationwide, non-exclusive licensing of terrestrial transmitters in the 3650-3700 band, which should especially benefit wireless ISPs (WISPs) serving

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\* See 47 U.S.C. § 310(d).

† The FCC announced a policy in favor of secondary markets back in 2000. See *Principles for Promoting Efficient Use of Spectrum By Encouraging the Development of Secondary Markets, Policy Statement, 15 FCC Rcd 24178 (2000) (Secondary Markets Policy Statement)*. The first two important Report & Orders were issued in 2003 and 2008. See *In the Matter of Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets*, 2<sup>nd</sup> R&O, 19 FCC Rcd 17503 (2008).

‡ See *In the matter of Establishment of an Interference Temperature Metric to Quantify and Manage Interference*, 18 FCC Rcd 25309 (2003).

§ See *In the Matter of Facilitating Opportunities for Flexible, Efficient, and Reliable Spectrum Use Employing Cognitive Radio Technologies*, R&O, 20 FCC Rcd 5486 (2005).

\*\* See 1<sup>st</sup> R&O, *Revision of Part 15 of the Commission’s Rules Regarding Ultra-Wideband Transmission Systems*, 17 FCC Rcd 7435 (2002) (permitting marketing and operation of certain UWB devices).

†† See *In the Matter of Establishment of an Interference Temperature Metric to Quantify and Manage Interference and to Expand Available Unlicensed Operation in Certain Fixed, Mobile and Satellite Frequency Bands*, 22 FCC Rcd 8938 (2007).

rural areas.\* (Think of this as Wi-Fi with extreme power and range.) This is not the same as unlicensed. Rather, it is a non-exclusive license, which requires licensees to register and to use “smart” devices that minimize interference using “contention-based protocol,” and has reasonable power and emission limits. The FCC codified these regulations under Part 90 (“Private Land Mobile Radio Services”), new subpart Z (“3650 MHz Wireless Broadband Services”).

c. *More “licensed by rule” spectrum: Part 95.* In December 2012, the FCC proposed creating a new Citizens Broadband Service in the 3550-3650 MHz band, which is currently used for military and satellite services. The goal would be to use small cells (low-powered wireless base stations) and spectrum sharing to allow three coordinated tiers of users: “incumbent access,” which is afforded full interference protection; “protected access,” which privileges hospitals, government facilities, and public safety entities; and “general authorized access,” which provides general usage constrained by the requirement of checking a dynamically updated database for possible interference. This service would be licensed by rule under Part 95, similar to CB radio.

d. *More unlicensed spectrum: Part 15, u-NII.* In 2003, the FCC opened up 255 MHz of spectrum for unlicensed-National Information Infrastructure devices (u-NII).<sup>†</sup> The most prominent u-NII devices<sup>‡</sup> are wireless network devices (Wi-Fi products) that meet 802.11(a) industry standards. (This is why newer Wi-Fi routers operate in both the 5 GHz band as well as the traditional 2.4 GHz band). These devices must satisfy the Commission’s Part 15 rules, chief among them a requirement of low power transmission. In 2013, the FCC

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\* *In the Matter of Wireless Operations in the 3650-3700 MHz Band*, 20 FCC Rcd 6502 (2005). See generally 47 CFR Part 90, Subpart Z (Wireless Broadband Services in the 3650-3700 MHz Band). See also § 90.1319(a) (“shared basis only and will not be assigned for the exclusive use of any licensee”); (b) (“must employ a contention-based protocol”).

<sup>†</sup> See, e.g., *In the matter of Revision of Parts 2 and 15 of the Commission’s Rules to Permit Unlicensed National Information Infrastructure (U-NII) Devices in the 5 GHz band*, 18 FCC Rcd 24484 (2003) (opening up 255MHz of spectrum for u-NII devices, which will assist the growth of wireless ISPs (WISPs))

<sup>‡</sup> U-NII devices are defined as “intentional radiators operating in the frequency bands 5.15-5.35 GHz and 5.725-5.825 GHz that use wideband digital modulation techniques and provide a wide array of high data rate mobile and fixed communications for individuals, businesses, and institutions.” 47 C.F.R. § 15.403(s).

announced plans to release up to 195 MHz more spectrum in the 5 GHz band on the same unlicensed basis.\*

e. *More unlicensed spectrum: Part 15, White spaces.* When broadcast television was originally rolled out, the FCC sought to minimize interference. It did so crudely, by leaving vacant the channels on either side of a broadcast licensee. It also made sure that nearby cities had nonoverlapping channels. This means that a huge amount of spectrum is (intentionally) not used. However, as explained above, the technologies to avoid interference have gotten much better. On this basis, the FCC in 2008 authorized unlicensed TV band devices (TVBDs) to operate in *white spaces*, broadcast TV bands that are not being used by licensees.† Of course, the biggest concern is interference with existing television broadcast stations (as well as wireless microphones). The National Association of Broadcasters filed a petition for review with the D.C. Circuit Court of Appeals in 2009, which stayed proceedings until the Commission ruled on various petitions for reconsideration filed directly with the agency. In 2010, the FCC released a 2<sup>nd</sup> Memorandum Opinion & Order, which upheld the prior 2008 decision but made various minor tweaks in the regulations.‡ In order to avoid interference, TVBDs must check a dynamically updated database, and in June 2013, one of those databases, maintained by Google, was approved for use.§

8. *Hybrid: private commons.* In its 2<sup>nd</sup> Report & Order in the *Secondary Market* proceeding,\*\* the FCC green-lighted a secondary market arrangement

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\* See NPRM, *Unlicensed National Information Infrastructure (U-NII) Devices in the 5 GHz Band*, 28 FCC Rcd. 1769 (2013).

† See *In the Matter of Unlicensed Operation in the TV Broadcast Bands; Additional Spectrum for Unlicensed Devices, Below 900 MHz and in the 3 GHz*, 2<sup>nd</sup> R&O and MO&O, 23 FCC Rcd 16807 (2008) (allowing both fixed and portable devices to operate in white spaces on an unlicensed basis under particular circumstances that avoid interference).

‡ See *In the Matter of Unlicensed Operation in the TV Bands*, 2<sup>nd</sup> MO&O, 25 FCC Rcd. 18661 (2010).

§ See *Office of Engineering and Technology Announces the Approval of Google, Inc.'s TV Bands Database System for Operation*, Public Notice, 28 FCC Rcd. ET Docket No. 04-186, DA 13-1472 (June 28, 2013).

\*\* See *In the Matter of Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets*, 19 FCC Rcd 17503 (2004).

called “private commons.” Licensees with exclusive use licenses could open up their unused spectrum under this model, which would permit only “peer-to-peer communications between devices in a non-hierarchical network arrangement that does not utilize the network infrastructure of the licensee (or spectrum lessee).”<sup>\*</sup> The basic idea is that the licensee could set the technical parameters for devices to be used. Just as the FCC has adopted Part 15 rules for unlicensed devices to operate at various spectrum bands (consider cordless phones and 802.11 networks), a private party with excess spectrum could adopt private rules for devices to operate freely within its excess spectrum bands. The FCC held out the possibility that private commons could be an antidote to the tragedy of the commons since private commons could be “less susceptible to overcrowding.”<sup>†</sup>

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<sup>\*</sup> *Id.* at ¶ 91.

<sup>†</sup> *Id.* at ¶ 99.

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**CHAPTER 3****PRICING**

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**p.167, replace Note 8b with:**

b. *Interstate access charges.* The FCC continues to regulate the *interstate* component of access charges that LECs charge to IXCs for originating and terminating calls. This is done mostly under a price-cap method although smaller, often rural LECs have stayed under rate-of-return regulation. We will learn far more about access charges in our study of universal service later in this chapter. In the meantime, you should know that although interstate access charges are still regulated, there's been some deregulation. The basic rationale, as always, is that increased competition makes pricing regulation unnecessary. One of the principal goals of the 1996 Telecommunications Act was to increase competition in the local exchange—in other words, to have consumers have choices among multiple LECs and not just the incumbent LEC. Due to some increased competition, the FCC adopted the *Pricing Flexibility Order*\* in 1999, which gave LECs some immediate flexibility in pricing and set competition triggers that would further relax pricing regulations.

c. *Special access.* Recall the promise at the beginning of this chapter: understanding telephony would help you understand the Internet. Although our formal study of the Internet starts in the next chapter, we should flag here one important policy issue regarding “special access.” The sort of interstate access charges that we've been discussing above is known more specifically as “switched access,” which uses the LEC's *switch* to connect to the IXC's POP. There is, however, another type of access called “special access,” which does not use any local switches and instead connects end-users *directly* to their IXC's

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\* Fifth Report and Order and Further Notice of Proposed Rulemaking, *In re Access Charge Reform*, 14 FCC Rcd. 14221 (1999).

POP using dedicated high-bandwidth circuits.\* It turns out that to provide broadband Internet services to large businesses, universities, hospitals, and to mobile users, Internet service providers require these “special access” lines as a necessary input. The annual spending for special access lines runs anywhere from \$12 to \$18 billion dollars.

The *Pricing Flexibility Order* partly deregulated pricing for both switched and special access. Not surprisingly, the sellers of special access (big, incumbent LECs, such as Verizon and AT&T) have been trying to gain pricing flexibility per the triggers established in the Order. By contrast, buyers of special access, such as Sprint and T-Mobile (who need special access lines for their backhaul from cell towers), have complained to the FCC that they are being fleeced. In August 2012, the FCC suspended its automatic grants of pricing flexibility for special access services and launched a massive data collection effort<sup>†</sup> to gauge better the degree of competition that truly exists.

**p.191, insert before “2. Challenging Subsidies”:**

*Significant changes in 2011: Connect American Fund.* In late 2011, the FCC adopted a significant Order that restructured both universal service and inter-carrier compensation.<sup>‡</sup> (Intercarrier compensation is the fee that one carrier pays to another when it hands off traffic. Interstate access charges, which we studied above, is just one example of intercarrier compensation. We will explore the details of this Order at the end of the chapter, but for now, you should know that it created a new Connect America Fund (which replaced the High Cost fund), and added broadband Internet access and mobile voice and data to the list of communications services that Americans should be able to access universally.

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\* See 47 C.F.R. Part 69.

<sup>†</sup> See *In the Matter of Special Access for Price Cap Local Exch. Carriers*, 27 FCC Rcd. 10557 (2012).

<sup>‡</sup> See R&O and FNPRM, *In the Matter of Connect Am. Fund*, 26 FCC Rcd. 17663 (2011).

**pp.197 (starting with Note 6) – 201 (before end of chapter), replace all text with:**

6. *The real impact.* According to the FCC, writing a decade later, the real impact of the *CALLS Order* was to catalyze innovative pricing amongst mobile telephony providers:

As a result of the *CALLS Order*, retail toll charges fell sharply, bringing average customer expenditures per minute of interstate toll calling down 18 percent during the year 2000. However, rather than merely reducing per-minute rates, wireless carriers started offering a new form of pricing, a fixed fee for a “bucket” of minutes, and ended distance-based pricing. As a result of these price declines, the gains in consumer surplus for wireless users in the United States from the *CALLS Order* were estimated to be about \$115 billion per year.\*

7. *Things in flux: The National Broadband Plan of 2010.* As part of the American Recovery and Reinvestment Act of February 2009, Congress instructed the FCC to submit a national broadband plan to ensure access to broadband capability by all Americans at affordable prices.† In March 2010, after dozens of workshops and field hearings, the FCC satisfied that request by delivering CONNECTING AMERICA: THE NATIONAL BROADBAND PLAN (“BROADBAND PLAN”).‡ The FCC’s goal is to have each household and business have access to actual download speeds of 4Mbps and actual upload speeds of 1 Mbps by 2020. In order to do that, the FCC explicitly recognized the need to work through complex universal service and intercarrier compensation issues.

**NOTE: CONNECT AMERICA FUND**

According to the FCC’s BROADBAND PLAN, 24 million Americans (one in thirteen) live in areas with no access to broadband Internet of any sort. A natural governmental response would be to target universal service funds toward

\* See R&O and FNPRM, *In the Matter of Connect Am. Fund*, 26 FCC Rcd. 17663, at ¶ 751 (2011).

† American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, § 6001(k), 123 Stat. 115, 515-16 (2009) (ARRA).

‡ FCC, CONNECTING AMERICA: THE NATIONAL BROADBAND PLAN 135 (2010).

the rollout of broadband in those areas. Unfortunately, the USF that was created after the 1996 Telecommunications Act was limited to voice telephone service.

In the BROADBAND PLAN, the FCC changed course and recommended replacing the current high-cost program component of the USF (targeted to rural and high-cost areas) and the implicit subsidies still embedded in interstate access charges (as well as other forms of intercarrier compensation) with a new Connect America Fund (CAF) that would help address the broadband availability gap. In November 2011, the FCC released a significant Order that did just that.\*

First, the FCC adopted a new universal service principle, which adoption is specifically authorized under 47 U.S.C. § 254(b)(7): support for modern, broadband-capable networks.

Second, it created a new Connect America Fund (CAF) to replace the High Cost Fund. The goals of CAF include not only universal service of voice telephony but also universal availability of modern networks that can provide broadband Internet service as well as advanced mobile services (both voice and data). It's worth highlighting that the FCC is paying explicit attention to mobile services. Indeed, the Commission created a targeted CAF Mobility Fund, "the first universal service mechanism dedicated to ensuring availability of mobile broadband networks in areas where a private-sector business case is lacking."<sup>†</sup> Finally, the FCC adopted a goal of keeping prices reasonably comparable in all regions of the nation.

Third, the FCC adopted a specific budget for CAF, with annual funding capped at \$4.5 billion over the next six years. In the past, there had been many complaints and anxieties about fraud and waste within various components of the USF, and the FCC made clear its desire to increase financial accountability.

Fourth, eligible telecommunications carriers (ETCs) who receive USF monies must not only provide voice telephony services but also broadband services to their customers.

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\* See *In the Matter of Connect Am. Fund*, 26 FCC Rcd. 17663 (2011).

<sup>†</sup> *Id.* at ¶ 28.

Fifth, the FCC adopted various phase-in timetables depending on whether the territory is served by LECs rate regulated under “price caps” (large carriers) or “rate-of-return” (smaller carriers, operating in more difficult and expensive areas to serve). The phase-in details are beyond the scope of the text.

Since the 2011 Order, various orders and Further NPRMs have been issued. No doubt the details will take a lot of time and litigation to work through. The bigger picture to keep in mind, however, is the FCC’s decision to add broadband Internet as well as mobile voice and data to the list of services deemed worthy of universal service. Of course, universal service cannot be rationalized without addressing the intertwined issue of intercarrier compensation.

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**NOTE: INTERCARRIER COMPENSATION**

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Recall our careful study of interstate access charges. Well, these access charges are just a subset of the more general problem of intercarrier compensation. Back when AT&T was effectively a monopoly, things were so much simpler. Now, the modern “telephone” environment comprises heterogeneous networks owned by different firms. Therefore, completing a simple phone call often requires networks to hand off traffic to other networks. When those bits of information exchange, are pennies exchanged as well? And if so, who or what sets the prices?

*LEC*  $\leftrightarrow$  *IXC*: *Access Charges*. We have already learned that LECs provide exchange access to interexchange carriers (IXCs) to originate and terminate calls. For such services, IXCs have to pay LECs *access charges*. As we have already discussed, the FCC has regulated the rates of interstate access charges.

You might assume that the FCC treats incumbent LECs (ILECs) differently from competitive LECs (CLECs): after all, CLECs are newer entrants in the local telephone business, and they lack the historical market dominance of the incumbent. But this misunderstands the nature of the power wielded by all LECs, whether they be incumbents or new entrants. Even CLECs enjoy a terminating access monopoly for all its subscribers. Put another way, suppose that a long-distance caller wants to contact someone who subscribes to a CLEC with tiny market share. Regardless of how small the CLEC’s market share, the caller’s IXC must still pay access charges to that terminating CLEC—there’s

no way to avoid this party if the call is to be completed. In the 1990s, some CLECs tariffed exorbitant fees for terminating long distance calls and insisted that IXCs pay the filed rates. The FCC adjudicated some of these rates as unjust and unreasonable under 47 U.S.C. § 201.\* To avoid similar ploys, in 2001, the FCC adopted a general rule that capped CLEC interstate access charges to the price charged by ILECs.†

Finally, don't forget the federalism wrinkles. Although the FCC sets interstate access charges, the state PUCs have historically set *intrastate* access charges. Since 1996, the FCC has tried aggressively to push down interstate access charges to their actual cost. By comparison, states generally have been much slower to follow suit. That's why interstate access charges tend to be lower than intrastate access charges.

*LEC ← → LEC: Reciprocal Compensation.* Now suppose you live in a downtown loft and are calling a nearby office building. Your wireline telephone provider is Verizon, but the office building is serviced by a competitive LEC (CLEC) called TelePacific. In order to complete the call, somehow the signal must traverse Verizon's network onto TelePacific. Are there access charges here too?

Although this handoff between LECs seems technologically and conceptually similar to the IXC-LEC handoff inherent in long distance, the access charge regime does not apply. Instead, in the parlance of the 1996 Telecommunications Act, it's called "reciprocal compensation." Section 251(b)(5) specifically requires all LECs to establish "reciprocal compensation arrangements for the transport and termination of telecommunications." The rates that LECs might charge each other is governed by private negotiated agreement between the carriers or set by state PUCs, which must regulate in a manner consistent with the FCC's pricing methodology. In magnitude, these reciprocal compensation payments tend to be lower than either intra- or interstate access charges.

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\* See, e.g., *In the Matters of AT&T Corp., Complainant, v. Business Telecom, Inc.*, MO&O, 16 FCC Rcd 12312 (2001) (holding that BTI's rate of 7.18 cents per minute violated § 201(b)).

† See 47 CFR § 61.26(b).

At this point, you can already see the potential arbitrariness of intercarrier compensation. Access charges arose from the break-up of AT&T, and are different depending on whether they are intra- or interstate. By contrast, reciprocal compensation agreements arose from the Telecommunications Act of 1996, as it tried to induce competition in the local loop. Things get even crazier if we add cell phones (CMRS)\* and the Internet. As the FCC recently put it:

As a result of this long history, today, there are two primary types of intercarrier compensation regulation: (1) access charges; and (2) reciprocal compensation. However, the rates that apply to traffic under these systems continue to depend on a number of factors including: (1) where the call begins and ends (interstate, intrastate, or “local”); (2) what types of carriers are involved (incumbent LECs, competitive LECs, interexchange carriers (IXCs), wireless); and (3) the type of traffic (wireline voice, wireless voice, ISP-bound, data). The resulting patchwork of rates and regulations is inefficient, wasteful and slowing the evolution to IP [Internet Protocol] networks.†

*Gaming the system.* This crazy patchwork has led to gaming and arbitrage. Consider for example “access stimulation” where the goal is to drive calls to a terminating LEC that can charge high interstate access charges. Various “free” services such as “free telephone conference” numbers and adult chat lines are free to end-users like you and me because they’re making a killing from our IXCs who have to pay per minute access charges. As the FCC explains:

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\* Roughly speaking, CMRS providers cannot demand “access charges” from IXCs who terminate long distance calls to cell phones. They’re, of course, free to negotiate private agreements if they can do so. See *In the Matter of Petitions of Sprint PCS and AT&T Corp., For Declaratory Ruling Regarding CMRS Access Charges*, 17 FCC Rcd 13192, ¶¶ 8-9 (2002). If a CMRS terminates “local” traffic from a nearby LEC (or vice versa) in the same Metropolitan Trading Area (MTA), then the reciprocal compensation regime applies. Any such compensation, if there is any, must involve the sending network paying the receiving network for terminating calls. See 47 C.F.R. § 20.11(a)(b) (principle of “mutual compensation”). Don’t fret over the details since the FCC is in the process of revamping all these rules.

† *In the Matter of Connect America Fund, NPRM & Further NPRM*, 26 FCC Rcd 4554, 4707 ¶ 502 (2011).

[A]ccess stimulation [involves] arrangements in which carriers, often competitive carriers, profit from revenue-sharing agreements by operating in an area where the incumbent carrier has a relatively high per-minute interstate access rate. Under our existing rules, the competitive carrier benchmarks its rate to that of the incumbent rural carrier, but the revenue-sharing arrangement results in a volume of traffic that is more consistent with a larger carrier. A competitive carrier could, for example, generate millions of dollars in revenues each month from other carriers simply by entering into a revenue sharing arrangement with a company that operates a chat line.\*

Or consider “phantom traffic,” which is a call whose true origin is unknown or disguised in order to avoid various intercarrier connection charges. For example, if intrastate access charges (historically set by the state PUC) are higher than interstate access charges (set by the FCC), an IXC will have the incentive to make an intrastate long distance call appear as an interstate long distance call. In FCC filings, various parties have complained that phantom traffic is a substantial problem, with estimates suggesting that anywhere from 3 to 20% of all traffic is “phantom.”†

*Intercarrier Compensation Reform 2011.* You should now have a sense of why intercarrier compensation has to be comprehensively overhauled. In the same Order that restructured universal service and created the Connect American Fund, the FCC adopted just such an overhaul and embraced a unified intercarrier compensation regime. The FCC took immediate steps to end access stimulation (by creating clear conditions for what counts as stimulation, e.g., a revenue sharing agreement, or a 3-to-1 interstate terminating-to-originating traffic ratio within a calendar month)‡ and phantom traffic (by modifying call signaling rules to require the calling party number).

Next, it adopted a uniform “bill-and-keep” framework for all telecommunications traffic exchanged with a LEC, including access charges paid by IXCs

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\* *Id.* at ¶ 36.

† 26 FCC Rcd. at ¶ 703.

‡ *Id.* at ¶ 667.

and reciprocal compensation payments paid by other LECs or CMRS providers. “Bill-and-keep” means that a carrier does not charge another carrier for sending or receiving traffic. Instead, a carrier recovers costs solely by billing its own subscriber. This approach differs substantially from the more traditional calling-party-network-pays model.

To charge subscribers (instead of other carriers), the Commission authorized LECs to initiate a new limited monthly charge, called the Access Recovery Charge (ARC) on wireline telephony service, with various caps to protect consumers. If subscriber revenue isn’t enough, the LEC can then look to the Universal Service Fund as well as state universal service funds for further subsidies. Given the enormous change, the FCC has planned the transition in multiple steps, over a six to nine year glide path, depending on the circumstances. In justifying this framework, the FCC repeatedly pointed out that a bill-and-keep framework would ease the transition to more modern phone networks based on Internet Protocol (the language of the Internet), promote competitive discipline (since the subscriber has a direct contractual relationship with the carrier), decrease arbitrage opportunities, and promote administrative simplicity.

The FCC located its legal authority to adopt the bill-and-keep framework in various statutory provisions, including 47 U.S.C. §§ 251(b)(5). Recall that § 251(b)(5) required LECs to establish reciprocal compensation agreements. Although the FCC in the past had interpreted this provision to cover only LEC-to-LEC transfers within the same local area, the FCC has since then interpreted the section more broadly, to include exchanges of all telecommunications traffic, including LEC-IXC handoffs. Importantly, under the FCC’s interpretation, this includes not only interstate but also intrastate exchanges of telecommunications. This is why the FCC felt comfortable adopting the unified framework of bill-and-keep not only for interstate access charges, which the FCC has always controlled, *but also intrastate access charges, which has historically been set by state PUCs.*\*

This ambitious attempt to reform intercarrier compensation prompted numerous petitions for review, which were consolidated by the Judicial Panel on Multidistrict Litigation into the Tenth Circuit Court of Appeals. In *In re FCC*

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\* Another source of power claimed by the FCC was 47 U.S.C. § 332, which governs mobile telephony. *See id.* at ¶ 779.

*11-161*, 753 F.3d 1015 (10th Cir. 2014), issued on May 23, 2014, the FCC won a resounding victory. On essentially all aspects of the Connect American Fund and the Intercarrier Compensation reform, the court held that the FCC did not act arbitrarily or contrary to statute.

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**CHAPTER 4****BAD CONTENT**

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**p.237, insert at the end of Note 7:**

The Supreme Court granted cert. again, but managed to avoid the direct First Amendment issue. Instead, in *FCC v. Fox, Inc. (Fox II)*,\* the Court decided the case on Fifth Amendment vagueness grounds. The Court first explained the void-for-vagueness doctrine:

Even when speech is not at issue, the void for vagueness doctrine addresses at least two connected but discrete due process concerns: first, that regulated parties should know what is required of them so they may act accordingly; second, precision and guidance are necessary so that those enforcing the law do not act in an arbitrary or discriminatory way. *Grayned v. City of Rockford* (1972). When speech is involved, rigorous adherence to those requirements is necessary to ensure that ambiguity does not chill protected speech.†

Applying this standard to the facts, the Court concluded that the broadcasters were not granted “fair notice . . . that fleeting expletives and momentary nudity could be found actionably indecent.”‡ The majority opinion, authored by Justice Kennedy, made explicit that it was not addressing the First Amendment argument or reconsidering *Pacifica*. Justice Ginsburg, who concurred in the judgment, specifically stated that *Pacifica* was wrongly decided. Justice Sotomayor did not participate in the deliberations.

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\* 132 S.Ct. 2307 (2012).

† *Id.* at 2317.

‡ *Id.* at 2320.

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**CHAPTER 5****GOOD CONTENT**

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**p.434, insert before section starting “b. Direct Broadcast Satellite...”:**

Our focus on the *Turner* case and the historical context that produced “must carry” regulation might lead you to believe that broadcasters are still trying to force themselves onto unwilling cable operators. Actually, the tables have now turned, and broadcasters are instead demanding payment for “retransmission consent.”\* As explained above, every three years, broadcasters can insist on retransmission consent from cable operators as well as MVPDs instead of must-carry:

**47 U.S.C. § 325. False, fraudulent, or unauthorized transmissions**

(a). False distress signals; rebroadcasting programs

No person within the jurisdiction of the United States shall knowingly utter or transmit, or cause to be uttered or transmitted, any false or fraudulent signal of distress, or communication relating thereto, nor shall any broadcasting station rebroadcast the program or any part thereof of another broadcasting station without the express authority of the originating station.

(b) Consent to retransmission of broadcasting station signals

(1) No cable system or other multichannel video programming distributor shall retransmit the signal of a broadcasting station, or any part thereof, except

(A) with the express authority of the originating station;

In the past, a cable operator often acquired retransmission consent rights in exchange for in-kind benefits, such as carriage of other channels affiliated with

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\* 47 U.S.C. § 325(b)(1)(A). The FCC recently fined a cable operator, TV Max, Inc., \$2.25 million for retransmitting the signals of six television broadcast stations without retransmission consent. *See* Press Release, FCC, FCC Proposes \$2.25 Million Forfeiture Against TV Max, Inc. For Retransmission Consent Violations (June 25, 2013), <http://www.fcc.gov/document/fcc-proposes-225-million-forfeiture-against-tv-max-inc>.

the broadcaster on the cable system or advertising time. However, broadcasters are now insisting on direct financial payments. Bickering between the local cable operator and local broadcast station over the financial terms of retransmission consent have produced customer confusion and ire. In 2011, the FCC launched an NPRM<sup>\*</sup> to try to provide more guidance on “good faith” negotiation, which the law requires.<sup>†</sup> In the same NPRM, the FCC suggested eliminating the network non-duplication and syndicated exclusivity rules because of concerns that they might give too much power to the local broadcast affiliate.

Recently, the FCC addressed the practice of broadcast stations joining together to negotiate retransmission consent fees collectively against cable companies and other MVPDs (multichannel video programming distributors). The commission held that any “joint negotiation by stations that are ranked among the top four stations in a market as measured by audience share (“Top Four” stations) . . . constitutes a violation of the statutory duty to negotiate retransmission consent in good faith.”<sup>‡</sup>

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<sup>\*</sup> NPRM, *In the Matter of Amendment of the Commission’s Rules Related to Retransmission Consent*, 26 FCC Rcd. 2718 (2011).

<sup>†</sup> See 47 U.S.C. § 325(b)(3)(C); 47 CFR §76.65. The retransmission consent requirement and good faith negotiations requirement apply not only to cable operators but to all MVPDs.

<sup>‡</sup> *In the Matter of Amendment of the Comm’n’s Rules Related to Retransmission Consent*, 29 F.C.C. Rcd. 3351 ¶ 1 (2014).

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**CHAPTER 6****CONSOLIDATION**

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**p.512, before section d., insert new note:**

7. *The FCC's most recent response.* In April 2014, the FCC issued a Report and Order that was meant to respond to *Prometheus II* and also complete the quadrennial review of broadcast ownership rules, started back in 2010.\* (Recall that under 47 U.S.C. § 202(h), the FCC must review broadcast ownership rules every four years to see if they still serve the public interest.) Although the FCC made a few changes (e.g., on Joint Service Agreements between broadcast stations), it confessed that it was unable to complete the review on time with the existing data. Therefore, instead of concluding its 2010 Quadrennial Review, the FCC folded that proceeding into the next 2014 Quadrennial Review. In the Further Notice of Proposed Rulemaking portion, the Commission foreshadowed two possible ownership rule changes: (1) repealing the television/radio cross-ownership rule, and (2) permitting more newspaper/broadcast cross-ownership through some as yet undetermined case-by-case process. Multiple petitions for review have already been filed.

**p.527, before section break, insert new note:**

6. *Kicking the can down the road.* In the last paragraph quoted above, the Third Circuit Court of Appeals wrote explicitly what the FCC would have to do. However, in April 2014, the FCC admitted that it could not finish its 2010 Quadrennial Review on time and said that it would roll up the proceedings into the subsequent 2014 Quadrennial Review. On the issue of diversity, the Commission's tentative plan, as expressed in the Further Notice of Proposed

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\* See *In the Matter of 2014 Quadrennial Regulatory Review*, FCC 14-28, 2014 WL 1466887 (rel. Apr. 15, 2014).

Rulemaking, is to keep the class-based definition of eligible entity: “[W]e tentatively find that we do not have a sufficient basis at this time to adopt an SDB [socially disadvantaged business] standard that would be likely to survive the heightened judicial scrutiny that a race-or gender-based eligible entity definition could trigger.”\*

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\* *In the Matter of 2014 Quadrennial Regulatory Review*, FCC 14-28, 2014 WL 1466887, ¶ 244 (rel. Apr. 15, 2014) (citing *Adarand Constructors, Inc. v. Peña*, 515 U.S. 200 (1995)).

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**CHAPTER 7****ACCESS**

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**p.558, insert at bottom of page:**

*Program Access.* The above rules concerned “program carriage,” which try to make sure that cable operators do not strong-arm or otherwise mistreat unaffiliated programming networks. The goal is to make sure that independent networks can get *carried* on the cable operator without giving up too much. There is, however, another set of rules called “program access,” which is designed to protect competing MVPDs from being shut out of content that the cable operator has some ownership stake in.\* In other words, the goal is to ensure that competitor MVPDs are able to *access* programming that is somehow owned by a cable operator. One of these program access rules prohibited “exclusive contracts” (in areas served by the cable operator) between the cable operator and satellite-delivered programming vendors† that the cable operator has an ownership interest in.‡ The goal here was to ensure that content from these vendors could be purchased by other MVPDs who are competing with the cable operator in the same geographical market. Recently, the FCC allowed this categorical ban to expire because it was deemed no longer necessary in the public interest. The Commission agreed to hear complaints instead on a case-by-case basis.§

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\* See 47 U.S.C. § 538; 47 C.F.R. § 76.1002.

† The statute only applied to programming transmitted or retransmitted by satellite for reception by cable operators. Back in 1992, this was nearly the exclusive way that cable operators received their programming.

‡ 47 U.S.C. § 548(c)(2)(D); 47 C.F.R. § 76.1002(c)(2).

§ See R&O, *In the matter of Revision of the Commission’s Program Access rules*, 27 FCC Rcd. 12605 (2012).

**p.599, insert after Note 9:**

10. *Mobile telephony?* The discussion above focused on wireline telephony, but a conceptually similar question could be asked of mobile telephony. Given that CMRS providers compete against each other in terms of network coverage, should a competitor have any right to have its customers “access” or “roam” on another mobile provider’s network? In 2007, the FCC determined that as common carriers, governed by 47 U.S.C. §§ 201 and 202 of Title II, CMRS providers had an obligation to allow automatic roaming for *voice* services upon reasonable request, on a just, reasonable, and non-discriminatory basis.\* In 2011, the FCC added that facilities-based CMRS providers must also offer *data* roaming arrangements to other providers on commercially reasonable terms.† AT&T and Verizon, the two largest providers, opposed this requirement. All other providers supported it, with many of them complaining that the major nationwide providers had refused to negotiate 3G roaming agreements in good faith. The FCC adopted the data roaming regulation under its Title III authority.‡

**p.629, insert new Note 8:**

8. *Verizon v. FCC.* After official publication of the Open Internet rules, multiple parties, including the very eager Verizon, filed petitions for review. Since multiple petitions were filed in multiple circuits, the case was assigned by lottery. To Verizon’s delight, the case was sent to the DC Circuit Court of Appeals. On January 14, 2014, that court issued its opinion.

The first central and threshold question was whether the FCC had “ancillary jurisdiction” (akin to subject matter jurisdiction) to promulgate the Open Internet rules in the first place. This is the question posed *supra* in Note 7. The court answered yes—a big win for the FCC—and we study that jurisdictional question carefully in the next chapter. The second central question was

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\* See R&O and NPRM, *Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers*, 22 FCC Rcd 15817, 15818 ¶ 1 (2007).

† 2<sup>nd</sup> R&O, *Reexamination of Roaming Obligations of Commercial Mobile Radio Serv. Providers & Other Providers of Mobile Data Servs.*, 26 FCC Rcd. 5411, 5418 ¶ 13 (2011).

‡ See *id.* at ¶ 62.

whether the Open Internet rules were lawful. The court held that they were not—a big win for Verizon— because some of the rules treated broadband service providers as “common carriers,” which the Communications Act forbade. We’ll study the details further in the next chapter.

**p.629, insert after Note 8:**

9. *Third Time is a Charm*. Following the D.C. Circuit’s decision in *Verizon v. FCC* on January 14, 2014, vacating the anti-discrimination and anti-blocking rules, the case was remanded to the FCC for further proceedings. This forced the Commission, led by Chairman Tom Wheeler, to go back to the drawing board, yet again, to find a way to issue rules that the court held would impose “common carrier” obligations. One obvious solution, which will be discussed in the next chapter, was to reclassify broadband as a “telecommunications service” and regulate the providers as common carriers. Many thought that such a fundamental shift in regulatory policy would draw the ire of industry and congressional leaders. Nevertheless, in the spring of 2015 the FCC issued a Declaratory Ruling and Order reclassifying providers of “broadband Internet access services” as common carriers subject to the Commission’s Title II authority, and imposing revised open Internet rules.

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**PROTECTING AND PROMOTING THE OPEN INTERNET**

R&O, 30 FCC Rcd.5601 (2015)

7. The benefits of rules and policies protecting an open Internet date back over a decade and must continue. Just over a year ago, the D.C. Circuit in *Verizon v. FCC* struck down the Commission’s 2010 conduct rules against blocking and unreasonable discrimination.<sup>2</sup> But the *Verizon* court upheld the Commission’s finding that Internet openness drives a “virtuous cycle” in which innovations at the edges of the network enhance consumer demand, leading to expanded investments in broadband infrastructure that, in turn, spark new innovations at the edge.<sup>3</sup> The *Verizon* court further affirmed the

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<sup>2</sup> *Verizon v. FCC*, 740 F.3d 623 (D.C. Cir. 2014).

<sup>3</sup> *Id.* at 659.

Commission's conclusion that "broadband providers represent a threat to Internet openness and could act in ways that would ultimately inhibit the speed and extent of future broadband deployment."<sup>4</sup>

8. Threats to Internet openness remain today . . . Verizon frankly told the court at oral argument, but for the 2010 rules, it would be exploring agreements to charge certain content providers for priority service.<sup>6</sup> Indeed, the wireless industry had a well-established record of trying to keep applications within a carrier-controlled "walled garden" in the early days of mobile applications. That specific practice ended when Internet Protocol (IP) created the opportunity to leap the wall. But the Commission has continued to hear concerns about other broadband provider practices involving blocking or degrading third-party applications.

9. Emerging Internet trends since 2010 give us more, not less, cause for concern about such threats. First, mobile broadband networks have massively expanded since 2010. They are faster, more broadly deployed, more widely used, and more technologically advanced. At the end of 2010, there were about 70,000 devices in the U.S. that had LTE wireless connections. Today, there are more than 127 million. . . . mobile broadband is becoming an increasingly important pathway to the Internet independent of any fixed broadband connections consumers may have, given that mobile broadband is not a full substitute for fixed broadband connections. And consumers must be protected, for example from mobile commercial practices masquerading as "reasonable network management." Second, and critically, the growth of online streaming video

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<sup>4</sup> Id. at 645.

<sup>6</sup> Verizon Oral Arg. Tr. at 31 ("I'm authorized to state by my client [Verizon] today that, but for these rules, we would be exploring those commercial arrangements, but this order prohibits those, and in fact would shrink the types of services that will be available on the Internet."). But see Letter from William H. Johnson, Vice President & Associate General Counsel, Verizon, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 14-28 at 1 (filed Feb. 11, 2015) (Verizon Feb. 11 Ex Parte Letter) (arguing that "[t]he 'commercial arrangements' referenced by counsel had nothing to do with 'restrict[ing] access' to content"). Also, during the oral argument before the D.C. Circuit, Verizon stated that "in paragraph 64 of the Order the Agency also sets forth the no charging of edge providers rule as a corollary to the no blocking rule, and that's a large part of what is causing us our harm here." In response, Judge Silberman stated, "if you were allowed to charge, which are you assuming you're allowed to charge because of the anti-common carrier point of view, if somebody refused to pay then just like in the dispute between C[B]S and Warner, Time Warner . . . you could refuse to carry." Verizon's counsel responded: "[r]ight." Verizon Oral Arg. Tr. at 28.

services has spurred further evolution of the Internet. Currently, video is the dominant form of traffic on the Internet. These video services directly confront the video businesses of the very companies that supply them broadband access to their customers.

10. The Commission, in its May *Notice of Proposed Rulemaking*, asked a fundamental question: “What is the right public policy to ensure that the Internet remains open?” It proposed to enhance the transparency rule, and follow the *Verizon* court’s blueprint by relying on section 706 to adopt a no-blocking rule and a requirement that broadband providers engage in “commercially reasonable” practices. . . .

11. Three overarching objectives have guided us . . . based on the vast record before the Commission: America needs more broadband, better broadband, and open broadband networks. These goals are mutually reinforcing, not mutually exclusive. Without an open Internet, there would be less broadband investment and deployment. And, as discussed further below, all three are furthered through the open Internet rules and balanced regulatory framework we adopt today.<sup>12</sup>

#### A. Strong Rules That Protect Consumers from Past and Future Tactics that Threaten the Open Internet

##### 1. *Clear, Bright-Line Rules*

15. *No Blocking.* Consumers who subscribe to a retail broadband Internet access service must get what they have paid for—access to all (lawful) destinations on the Internet. This essential and well-accepted principle has long been a tenet of Commission policy, stretching back to its landmark decision in

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<sup>12</sup> Consistent with the *Verizon* court’s analysis, this Order need not conclude that any specific market power exists in the hands of one or more broadband providers in order to create and enforce these rules. Thus, these rules do not address, and are not designed to deal with, the acquisition or maintenance of market power or its abuse, real or potential. Moreover, it is worth noting that the Commission acts in a manner that is both complementary to the work of the antitrust agencies and supported by their application of antitrust laws. See generally 47 U.S.C. § 152(b) (“[N]othing in this Act . . . shall be construed to modify, impair, or supersede the applicability of any of the antitrust laws.”). Nothing in this Order in any way precludes the Antitrust Division of the Department of Justice or the Commission itself from fulfilling their respective responsibilities under Section 7 of the Clayton Act (15 U.S.C. §18), or the Commission’s public interest standard as it assesses prospective transactions.

*Carterfone*, which protected a customer's right to connect a telephone to the monopoly telephone network. Thus, this Order adopts a straightforward ban:

*A person engaged in the provision of broadband Internet access service, insofar as such person is so engaged, shall not block lawful content, applications, services, or non-harmful devices, subject to reasonable network management.*

16. *No Throttling.* The 2010 open Internet rule against blocking contained an ancillary prohibition against the degradation of lawful content, applications, services, and devices, on the ground that such degradation would be tantamount to blocking. This Order creates a separate rule to guard against degradation targeted at specific uses of a customer's broadband connection:

*A person engaged in the provision of broadband Internet access service, insofar as such person is so engaged, shall not impair or degrade lawful Internet traffic on the basis of Internet content, application, or service, or use of a non-harmful device, subject to reasonable network management.*

17. The ban on throttling is necessary both to fulfill the reasonable expectations of a customer who signs up for a broadband service that promises access to all of the lawful Internet, and to avoid gamesmanship designed to avoid the no-blocking rule by, for example, rendering an application effectively, but not technically, unusable. It prohibits the degrading of Internet traffic based on source, destination, or content.<sup>17</sup> It also specifically prohibits conduct that singles out content competing with a broadband provider's business model.

18. *No Paid Prioritization.* Paid prioritization occurs when a broadband provider accepts payment (monetary or otherwise) to manage its network in a way that benefits particular content, applications, services, or devices. To protect against "fast lanes," this Order adopts a rule that establishes that:

*A person engaged in the provision of broadband Internet access service, insofar as such person is so engaged, shall not engage in paid prioritization.*

*"Paid prioritization" refers to the management of a broadband provider's network to directly or indirectly favor some traffic over other traffic, including through use of techniques such as traffic shaping, prioritization, resource reservation, or other*

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<sup>17</sup> To be clear, the protections of the no-blocking and no-throttling rules apply to particular classes of applications, content and services as well as particular applications, content, and services.

*forms of preferential traffic management, either (a) in exchange for consideration (monetary or otherwise) from a third party, or (b) to benefit an affiliated entity.*<sup>18</sup>

19. The record demonstrates the need for strong action. . . . Although there are arguments that some forms of paid prioritization could be beneficial, the practical difficulty is this: the threat of harm is overwhelming, case-by-case enforcement can be cumbersome for individual consumers or edge providers, and there is no practical means to measure the extent to which edge innovation and investment would be chilled. And, given the dangers, there is no room for a blanket exception for instances where consumer permission is buried in a service plan—the threats of consumer deception and confusion are simply too great.

*2. No Unreasonable Interference or Unreasonable Disadvantage to Consumers or Edge Providers*

20. [W]hen a broadband provider acts as a gatekeeper, it actually chokes consumer demand for the very broadband product it can supply.

21. The bright-line bans on blocking, throttling, and paid prioritization will go a long way to preserve the virtuous cycle. But not all the way. Gatekeeper power can be exercised through a variety of technical and economic means, and without a catch-all standard, it would be that, as Benjamin Franklin said, “a little neglect may breed great mischief.” Thus, the Order adopts the following standard:

*Any person engaged in the provision of broadband Internet access service, insofar as such person is so engaged, shall not unreasonably interfere with or unreasonably disadvantage (i) end users’ ability to select, access, and use broadband Internet access service or the lawful Internet content, applications, services, or devices of their choice, or (ii) edge providers’ ability to make lawful content, applications, services, or devices available to end users. Reasonable network management shall not be considered a violation of this rule.*

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<sup>18</sup> Unlike the no-blocking and no-throttling rules, there is no “reasonable network management” exception to the paid prioritization rule because paid prioritization is inherently a business practice rather than a network management practice.

22. This “no unreasonable interference/disadvantage” standard protects free expression, thus fulfilling the congressional policy that “the Internet offer[s] a forum for a true diversity of political discourse, unique opportunities for cultural development, and myriad avenues for intellectual activity.”<sup>25</sup> And the standard will permit considerations of asserted benefits of innovation as well as threatened harm to end users and edge providers.

### 3. *Enhanced Transparency*

23. The Commission’s 2010 transparency rule, upheld by the *Verizon* court, remains in full effect.

### 4. *Scope of the Rules*

25. The open Internet rules described above apply to both fixed and mobile broadband Internet access service.

28. *Interconnection.* [The open Internet rules also apply to] the exchange of traffic between a broadband Internet access provider and connecting networks. The representation to retail customers that they will be able to reach “all or substantially all Internet endpoints” necessarily includes the promise to make the interconnection arrangements necessary to allow that access.

30. But this Order does not apply the open Internet rules to interconnection. Three factors are critical in informing this approach to interconnection. First, the nature of Internet traffic, driven by massive consumption of video, has challenged traditional arrangements—placing more emphasis on the use of CDNs or even direct connections between content providers (like Netflix or Google) and last-mile broadband providers. Second, it is clear that consumers have been subject to degradation resulting from commercial disagreements, perhaps most notably in a series of disputes between Netflix and large last-mile broadband providers. But, third, the causes of past disruption and—just as importantly—the potential for future degradation through interconnection disputes—are reflected in very different narratives in the record.

31. While we have more than a decade’s worth of experience with last-mile practices, we lack a similar depth of background in the Internet traffic exchange context. Thus, we find that the best approach is to watch, learn, and act as required, but not intervene now, especially not with prescriptive rules. This

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<sup>25</sup> 47 U.S.C. § 230(a)(3).

Order—for the first time—provides authority to consider claims involving interconnection, a process that is sure to bring greater understanding to the Commission.

32. *Reasonable Network Management.* As with the 2010 rules, this Order contains an exception for reasonable network management, which applies to all but the paid prioritization rule (which, by definition, is not a means of managing a network):

*A network management practice is a practice that has a primarily technical network management justification, but does not include other business practices. A network management practice is reasonable if it is primarily used for and tailored to achieving a legitimate network management purpose, taking into account the particular network architecture and technology of the broadband Internet access service.*

33. Recently, significant concern has arisen when mobile providers' have attempted to justify certain practices as reasonable network management practices, such as applying speed reductions to customers using "unlimited data plans" in ways that effectively force them to switch to price plans with less generous data allowances. For example, in the summer of 2014, Verizon announced a change to its "unlimited" data plan for LTE customers, which would have limited the speeds of LTE customers using grandfathered "unlimited" plans once they reached a certain level of usage each month. Verizon briefly described this change as within the scope of "reasonable network management," before changing course and withdrawing the change.

34. With mobile broadband service now subject to the same rules as fixed broadband service, the Order expressly recognizes that evaluation of network management practices will take into account the additional challenges involved in the management of mobile networks, including the dynamic conditions under which they operate. It also recognizes the specific network management needs of other technologies, such as unlicensed Wi-Fi networks.

35. *Non-Broadband Internet Access Service Data Services.* The 2010 rules included an exception for "specialized services." This Order likewise recognizes that some data services—like facilities-based VoIP offerings, heart monitors, or energy consumption sensors—may be offered by a broadband provider but do not provide access to the Internet generally. . . . The Commission expressly reserves the authority to take action if a service is, in fact, providing the

functional equivalent of broadband Internet access service or is being used to evade the open Internet rules.

### III. REPORT AND ORDER ON REMAND: PROTECTING AND PROMOTING THE OPEN INTERNET

#### A. History of Openness Regulation

60. These rules are the latest in a long line of actions by the Commission to ensure that American communications networks develop in ways that foster economic competition, technological innovation, and free expression. Ever since the landmark 1968 *Carterfone* decision,<sup>56</sup> the Commission has recognized that communications networks are most vibrant, and best able to serve the public interest, when consumers are empowered to make their own decisions about how networks are to be accessed and utilized. Openness regulation aimed at safeguarding consumer choice has therefore been a hallmark of Commission policy for over forty years.

61. In *Carterfone*, the Commission confronted AT&T's practice of preventing consumers from attaching any equipment not supplied by AT&T to their home telephones, even if the attachment did not put the underlying network at risk. Finding AT&T's "foreign attachment" provisions unreasonable and unlawful, the Commission ruled that AT&T customers had the right to connect useful devices of their choosing to their home telephones, provided these devices did not adversely affect the telephone network.<sup>58</sup>

62. *Carterfone* . . . severed the market for customer premises equipment (CPE) from that for telephone service.<sup>59</sup> In doing so, the Commission allowed new participants and new ideas into the market, setting the stage for a wave of

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<sup>56</sup> *Carterfone*, 13 FCC 2d 420.

<sup>58</sup> *Carterfone*, 13 FCC 2d at 423-424 ("[O]ur conclusion here is that a customer desiring to use an interconnecting device . . . should be able to do so, so long as the interconnection does not adversely affect the telephone company's operations or the telephone system's utility for others.").

<sup>59</sup> As the Commission implicitly recognized, allowing AT&T to preclude adoption of even non-harmful third-party devices forestalled the development of a competitive telephone technology market, harming innovators and consumers alike. See *id.* at 424 ("No one entity need provide all interconnection equipment for our telephone system any more than a single source is needed to supply the parts for a space probe."); Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry), Docket No. 20828, Final Decision, 77 FCC 2d 384, 439 para. 141 (1980) (Computer II).

innovation that produced technologies such as the answering machine, fax machine, and modem—thereby removing a barrier to the development of the packet switched network that would eventually become the Internet.

63. Commitment to robust competition and open networks defined Commission policy at the outset of the digital revolution as well. In a series of influential decisions, known collectively as the *Computer Inquiries*, the Commission established a flexible regulatory framework to support development of the nascent information economy. The *Computer Inquiries* decisions separated the market for information services from the underlying network infrastructure, and imposed firm non-discrimination rules for network access. This system prevented network owners from engaging in anti-competitive behavior and spurred the development and adoption of new technologies.

64. The principles of open access, competition, and consumer choice embodied in *Carterfone* and the *Computer Inquires* have continued to guide Commission policy in the Internet era. . . . In recognition of this fact, in 2005, the Commission unanimously approved the *Internet Policy Statement*, which laid out four guiding principles designed to encourage broadband deployment and “preserve and promote the open and interconnected nature of the Internet.” These principles sought to ensure that consumers had the right to access and use the lawful content, applications, and devices of their choice online, and to do so in an Internet ecosystem defined by competitive markets.

65. From 2005 to 2011, the principles embodied in the *Internet Policy Statement* were incorporated as conditions by the Commission into several merger orders and a key 700 MHz license, including the SBC/AT&T, Verizon/MCI, and Comcast/NBCU mergers and the Upper 700 MHz C block open platform requirements. Commission approval of these transactions was expressly conditioned on compliance with the *Internet Policy Statement*. During this time, open Internet principles were also applied to particular enforcement proceedings aimed at addressing anti-competitive behavior by service providers.

67. In December 2010, the Commission adopted the *Open Internet Order*, a codification of the policy principles contained in the *Internet Policy Statement*. The *Open Internet Order* was based on broadly accepted Internet norms and the Commission’s long regulatory experience in preserving open and dynamic

communications networks. The *Order* adopted three fundamental rules governing Internet service providers: (1) no blocking; (2) no unreasonable discrimination; and (3) transparency. The no-blocking rule and no-unreasonable discrimination rules prevented broadband service providers from deliberately interfering with consumers' access to lawful content, applications, and services, while the transparency rule promoted informed consumer choice by requiring disclosure by service providers of critical information relating to network management practices, performance, and terms of service.

68. The antidiscrimination rule contained in the *Open Internet Order* operated on a case-by-case basis, with the Commission evaluating the conduct of fixed broadband service providers based on a number of factors, including conformity with industry best practices, harm to competing services or end users, and impairment of free expression. This no unreasonable discrimination framework applied to commercial agreements between fixed broadband service providers and third parties to prioritize transmission of certain traffic to their subscribers. The *Open Internet Order* also specifically addressed paid prioritization arrangements. It did not entirely rule out the possibility of such agreements, but made clear that such "pay for priority" deals and the associated "paid prioritization" network practices were likely to be problematic in a number of respects. Paid prioritization "represented a significant departure from historical and current practice" that threatened "great harm to innovation" online, particularly in connection with the market for new services by edge providers. Paid priority agreements were also viewed as a threat to non-commercial end users, "including individual bloggers, libraries, schools, advocacy organizations, and other speakers" who would be less able to pay for priority service. Finally, paid prioritization was seen giving fixed broadband providers "an incentive to limit the quality of service provided to non-prioritized traffic." As a result of these concerns, the Commission explicitly stated in the *Open Internet Order* that it was "unlikely that pay for priority would satisfy the 'no unreasonable discrimination' standard."

69. [T]he restrictions on blocking and discrimination were made subject to an exception for "reasonable network management," allowing service providers the freedom to address legitimate needs such as avoiding network congestion and combating harmful or illegal content. Additionally, in order to

account for then-perceived differences between the fixed and mobile broadband markets, the *Open Internet Order* exempted mobile service providers from the anti-discrimination rule, and only barred mobile providers from blocking “consumers from accessing lawful websites” or “applications that compete with the provider’s voice or video telephony services.” Lastly, the *Open Internet Order* made clear that the rules did not prohibit broadband providers from offering specialized services such as VoIP; instead, the Commission announced that it would continue to monitor such arrangements to ensure that they did not pose a threat to Internet openness.

70. Verizon subsequently challenged the *Open Internet Order* in the U.S. Court of Appeals for the D.C. Circuit, arguing, among other things, that the *Open Internet Order* exceeded the Commission’s regulatory authority and violated the Act. In January 2014, the D.C. Circuit upheld the Commission’s determination that section 706 of the Telecommunications Act of 1996 granted the Commission authority to regulate broadband Internet service providers, and that the Commission had demonstrated a sound policy justification for the *Open Internet Order*. Specifically, the court sustained the Commission’s findings that “absent rules such as those set forth in the *Open Internet Order*, broadband providers represent a threat to Internet openness and could act in ways that would ultimately inhibit the speed and extent of future broadband deployment.”

71. Despite upholding the Commission’s authority . . . [t]he D.C. Circuit vacated the no-blocking and antidiscrimination rules because it found that they impermissibly regulated fixed broadband providers as common carriers, which conflicted with the Commission’s prior classification of fixed broadband Internet access service as an “information service” rather than a telecommunications service. Likewise, the court found that the no-blocking rule as applied to mobile broadband conflicted with the Commission’s earlier classification of mobile broadband service as a private mobile service rather than a “commercial mobile service.” The *Verizon* court held that the “no unreasonable discrimination” standard adopted in the *Open Internet Order* was insufficiently distinguishable from the “nondiscrimination” standard applicable to common carriers. Central to the court’s rationale was its finding that, as formulated in the *Open Internet Order*, both rules improperly limited fixed broadband Internet access providers’ ability to engage in “individualized bargaining.”

72. Following the D.C. Circuit’s ruling, on May 15, 2014 the Commission issued a Notice of Proposed Rulemaking (*2014 Open Internet NPRM*) to respond to the lack of conduct-based rules to protect and promote an open Internet following the D.C. Circuit’s opinion in *Verizon v. FCC*. The Commission began the NPRM with a fundamental question: “What is the right public policy to ensure that the Internet remains open?” While the NPRM put forth various proposals, it sought broad comment on alternative paths to the right public policy solution—including areas such as the proper scope of the rules; the best ways to define, prevent, and treat violations of practices that may threaten an open Internet (including paid prioritization); enhancements to the transparency rule; and the appropriate source of legal authority to support new open Internet rules.

74. The public seized on these opportunities to comment, submitting an unprecedented 3.7 million comments by the close of the reply comment period on September 15, 2014, with more submissions arriving after that date. This record-setting level of public engagement reflects the vital nature of Internet openness and the importance of our getting the answer right in this proceeding.

#### B. The Continuing Need for Open Internet Protections

##### 3. *Mobile Broadband Services*

88. Today, we find that changes in the mobile broadband marketplace warrant a revised [regulatory] approach. We find that the mobile broadband marketplace has evolved, and continues to evolve, but is no longer in a nascent stage. [M]obile broadband networks are faster, more broadly deployed, more widely used, and more technologically advanced than they were in 2010. We conclude that it would benefit the millions of consumers who access the Internet on mobile devices to apply the same set of Internet openness protections to both fixed and mobile networks.

90. As consumers use smartphones and tablets more, they increasingly rely on mobile broadband as a pathway to the Internet. . . . In addition, evidence shows that consumers in certain demographic groups, including low income and rural consumers and communities of color, are more likely to rely on mobile as their only access to the Internet. . . . Additionally, rural consumers and businesses often have access to fewer options for Internet service, meaning that these customers may have limited alternatives when faced with restrictions to

Internet openness imposed by their mobile provider. Furthermore, just as consumer reliance on mobile broadband has grown, edge providers increasingly rely on mobile broadband to reach their customers.

91. Furthermore, the technology underlying today's mobile broadband networks, as compared to those deployed in 2010, not only provides operators with a greater ability to manage their networks consistent with the rules we adopt today, but also gives those operators a greater ability to engage in conduct harmful to the virtuous cycle in the absence of open Internet rules.<sup>185</sup> [C]ertain behaviors by broadband providers may impose negative externalities on the Internet ecosystem, resulting in less innovation from edge providers. We find that the same is true today for mobile wireless broadband providers, particularly as mobile broadband technology has become more widespread and mobile broadband services have become more integrated into the economy.

93. Despite their support of open Internet principles, several of the nationwide mobile providers oppose broader openness requirements for mobile broadband, arguing that additional rules are unnecessary in the mobile broadband market. T-Mobile, for example, argues that "robust retail competition in the mobile broadband market already constrains mobile provider behavior." Verizon comments that "consumer choice and competition also have ensured a differentiated marketplace in which providers routinely develop innovative offerings designed to outcompete competitors' offerings." AT&T contends that additional rules are unnecessary as mobile broadband providers are already investing in the networks, innovating, reducing prices, and thriving. CTIA contends that "the robust competitive conditions in the mobile broadband marketplace are a defining differentiator" and that "any new open Internet framework should account for the competitive mobile dynamic."

94. Based upon the significant changes in mobile broadband since 2010 discussed above, including the increased use of mobile broadband and the

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<sup>185</sup> See, e.g., OTI Reply at 23-24; Cisco, Integrated DPI and Cisco In-Line Services: Optimize the Flow of Traffic and Monetize Your Network, [www.cisco.com/c/en/us/solutions/collateral/wireless/network-traffic-optimization/white\\_paper\\_c11-607164-00.html](http://www.cisco.com/c/en/us/solutions/collateral/wireless/network-traffic-optimization/white_paper_c11-607164-00.html) (last visited Feb. 10, 2015) ("Industry experts agree that DPI and its complementary applications are the best way to increase network efficiency and a mobile operator's revenue."); see also Sandvine, Deep Packet Inspection (DPI), <https://www.sandvine.com/platform/deep-packet-inspection.html> (last visited Feb. 10, 2015).

greater ability of mobile broadband providers to engage in conduct harmful to the virtuous cycle, we are not persuaded that maintaining fewer open Internet protections for consumers of mobile broadband services would serve the public interest.

96. Although mobile providers generally argue that additional rules are not necessary to deter practices that would limit Internet openness, concerns related to the openness practices of mobile broadband providers have arisen. As we noted in the *2014 Open Internet NPRM*, in 2012, the Commission reached a \$1.25 million settlement with Verizon for restricting tethering apps on Verizon smartphones, based on openness requirements attached to Verizon's Upper 700 MHz C Block licenses. Also in 2012, consumers complained when they encountered problems accessing Apple's FaceTime application on AT&T's network.<sup>200</sup> More recently, significant concern has arisen when mobile providers' have attempted to justify certain practices as reasonable network management practices, such as applying speed reductions to customers using "unlimited data plans" in ways that effectively force them to switch to price plans with less generous data allowances.<sup>201</sup> [M[any mobile broadband provider practices are non-transparent, because customers receive "no warning or explanation of when their speeds will be slowed down." Other commenters . . . also cite mobile providers' blocking of the Google Wallet e-payment application. Although providers claimed that the blocking was justified based on security concerns, OTI notes that "this carrier behavior raised anticompetitive concerns when AT&T, Verizon and T-Mobile later unveiled their own mobile payment application, a competitor to Google Wallet . . . ." [We] find that the rules we adopt today for mobile network providers will help

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<sup>200</sup> AT&T initially restricted use of Apple's FaceTime and iPad application to times when the end user was connected to Wi-Fi and thus to another broadband provider. The Commission did not conclude whether such a practice violated open Internet principles. See David Kravets, AT&T Holding FaceTime Hostage is No Net-Neutrality Breach, *Wired.com* (Aug. 22, 2012) <http://www.wired.com/threatlevel/2012/08/facetime-net-neutrality0flap/> (last visited Feb. 10, 2015); see also Open Internet Advisory Committee, 2013 Annual Report (Aug. 20, 2013), at 39-46, <http://transition.fcc.gov/cgb/oia/oia-2013-annual-report.pdf> (2013 OIAC Annual Report).

<sup>201</sup> See Prepared Remarks of FCC Chairman Tom Wheeler, 2014 CTIA Show, Las Vegas, NV (Sept. 9, 2014).

guard against future incidents that have the potential to affect Internet openness and undermine a mobile broadband consumer's right to access a free and open Internet.

97. In addition, we agree with those commenters that argue that mobile broadband providers have the incentives and ability to engage in practices that would threaten the open nature of the Internet, in part due to consumer switching costs. Switching costs are a significant factor in enabling the ability of mobile broadband providers to act as gatekeepers. Microsoft states that “for the large number of applications that are available only in the mobile context, mobile broadband access providers today can be an edge provider's only option for reaching a particular end user,” and argues that, because of high switching costs, few mobile broadband consumers routinely switch providers. Therefore, Microsoft argues, “even if there is more than one mobile broadband access provider in a specific market, there may not be effective competitive alternatives (for edge providers or consumers) and these mobile broadband access providers retain the ability to act in a manner that undermines the competitive neutrality of the online marketplace.”

98. [T]hat many customers stay with their mobile wireless providers, despite expressing dissatisfaction with their current provider and despite the availability of alternate plans from other providers, suggests the presence of significant barriers to switching.<sup>214</sup> Furthermore, this has been a period of market and spectrum consolidation, which has decreased the choices available to consumers in many parts of the country. . . . Choices may be particularly limited in rural areas, both because fewer service providers tend to operate in these regions and because consumers may encounter difficulties in porting their numbers from national to local service providers.

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<sup>214</sup> Paul de Sa, Ian Chun, and Julia Zhen present an analysis of the price plans available from AT&T, Sprint, T-Mobile, and Verizon Wireless during the summer of 2014, concluding that “it almost always makes economic sense for ‘perfectly rational’ subscribers to change carriers, as there are generally cheaper plans available from rival carriers to attract switchers.” The authors argue that the low observed switching rates, despite the availability of these plans, “suggest[] that many other factors aside from price are relevant drivers of churn, consistent with [the authors’] view of substantial demand inertia.” Paul de Sa, Ian Chun, and Julia Zheng, Bernstein Research, *A Different Way to Compare Mobile Pricing (Or Does Discounting Matter?)* at 5 (August 21, 2014) (Aug. 2014 de Sa Pricing Report) (emphasis in original).

99. Switching costs may arise due to a number of factors that affect mobile consumers. For example, consumers may face costs due to informational uncertainty, particularly in the context of concerns over open Internet restrictions. The provision of wireless service involves the interaction between the wireless network operator, the various edge providers, the customer's handset or other equipment, and the conditions present in the specific location the customer wishes to use the service. In this environment, it can be very difficult for customers to ascertain the source of a service disruption, and hence whether switching wireless providers would solve the problem. Additionally, product differentiation can make it difficult for consumers to compare plans, which may also increase switching costs. Finally, customers may face a variety of hassle-related and financial switching costs. Disconnecting an existing service and activating a new one may involve early termination fees (ETFs), coordinating with multiple members of a family plan, billing set-up, transferring personal files, and porting phone numbers, each of which may create delays or difficulties for customers. As part of this process, some customers may need to replace their equipment, which may not be compatible with their new mobile service provider's network.

## VI. CONSTITUTIONAL CONSIDERATIONS

543. [S]ome commenters contend that the open Internet rules burden broadband providers' First Amendment rights and effect uncompensated takings of private property under the Fifth Amendment. We examine these arguments below and find them unfounded.

### A. First Amendment

#### 1. *Free Speech Rights*

544. The rules we adopt today do not curtail broadband providers' free speech rights. When engaged in broadband Internet access services, broadband providers are not speakers, but rather serve as conduits for the speech of others. The manner in which broadband providers operate their networks does not rise to the level of speech protected by the First Amendment. As telecommunications services, broadband Internet access services, by definition, involve transmission of network users' speech without change in form or content, so open Internet rules do not implicate providers' free speech rights. And even if broadband providers were considered speakers with respect to these services, the

rules we adopt today are tailored to an important government interest—protecting and promoting the open Internet and the virtuous cycle of broadband deployment—so as to ensure they would survive intermediate scrutiny.

545. This is not to say that we are indifferent to matters of free speech on the Internet. To the contrary, our rules serve First Amendment interests of the highest order, promoting “the widest possible dissemination of information from diverse and antagonistic sources” and “assuring that the public has access to a multiplicity of information sources” by preserving an open Internet. We merely acknowledge that the free speech interests we advance today do not inhere in broadband providers with respect to their provision of broadband Internet access services.

547. Claiming free speech protections under the First Amendment necessarily involves demonstrating status as a speaker—absent speech, such rights do not attach. In determining the limits of the First Amendment’s protections for courses of conduct, the Supreme Court has “extended First Amendment protections only to conduct that is inherently expressive.” To determine whether an actor’s conduct possesses “sufficient communicative elements to bring the First Amendment into play,” the Supreme Court has asked whether “[a]n intent to convey a particularized message was present and [whether] the likelihood was great that the message would be understood by those who viewed it.”

548. Broadband providers’ conduct with respect to broadband Internet access services does not satisfy this test, and analogies to other forms of media are unavailing. [Some commentators] compare their provision of broadband service to the operation of a cable television system, and point out that the Supreme Court has determined that cable programmers and cable operators engage in editorial discretion protected by the First Amendment. As a factual matter, broadband Internet access services are nothing like the cable service at issue in *Turner I*. In finding that cable programmers and cable operators are entitled to First Amendment protection, the *Turner I* court began with the uncontested assertion that “cable programmers and operators engage in and transmit speech, and they are entitled to the protection of the speech and press provisions of the First Amendment.” The court went on to explain that “cable programmers and operators ‘see[k] to communicate messages on a wide variety of topics and in a wide variety of formats’” through “original programming

or by exercising editorial discretion over which stations or programs to include in its repertoire.” Cable operators thus engage in protected speech when they both *engage in* and *transmit* speech with the intent to convey a message either through their own programming directly or through contracting with other programmers for placement in a cable package.

549. Broadband providers, however, display no such intent to convey a message in their provision of broadband Internet access services—they do not engage in speech themselves but serve as a conduit for the speech of others. The record reflects that broadband providers exercise little control over the content which users access on the Internet. Broadband providers represent that their services allow Internet end users to access all or substantially all content on the Internet, without alteration, blocking, or editorial intervention. End users, in turn, expect that they can obtain access to all content available on the Internet, without the editorial intervention of their broadband provider. . . . In providing these services, then, broadband providers serve as mere conduits for the messages of others, not as agents exercising editorial discretion subject to First Amendment protections.

550. Moreover, broadband is not subject to the same limited carriage decisions that characterize cable systems—the Internet was designed as a decentralized “network of networks” which is capable of delivering an unlimited variety of content, as chosen by the end user. In contrast, the *Turner I* court emphasized that the rules under consideration in that case regulated cable speech by “reduc[ing] the number of channels over which cable operators exercise unfettered control” and “render[ing] it more difficult for cable programmers to compete for carriage on the limited channels remaining.” Neither of these deprivations of editorial discretion translates to the Internet as a content platform. The arrival of one speaker to the network does not reduce access to competing speakers; nor are broadband providers limited by our rules in the direct exercise of their free speech rights. Lacking the exercise of editorial control and an intent to convey a particularized message, we find that our rules regulate the unexpressive transmission of others’ speech over broadband Internet access services, not the speech of broadband providers. As our rules merely affect what broadband providers “must *do* . . . not what they may or may not *say*,” the provision of broadband Internet access services falls outside the protections of the First Amendment outlined by the court in *Turner I*.

552. We also take note that, in other contexts, broadband providers have claimed immunity from copyright violations and other liability for material distributed on their networks because they lack control over what end users transmit and receive. Broadband providers are not subject to subpoena in a copyright infringement case because as a provider it “act[s] as a mere conduit for the transmission of information sent by others.” Acknowledging the unexpressive nature of their transmission function, Congress has also exempted broadband providers from defamation liability arising from content provided by other information content providers on the Internet.<sup>1710</sup> Given the technical characteristics of broadband as a medium and the representations of broadband providers with respect to their services, we find it implausible that broadband providers could be understood to be conveying a particularized message in the provision of broadband Internet access service.

553. Even if open Internet rules were construed to implicate broadband providers’ rights as speakers, our rules would not violate the First Amendment because they would be considered content-neutral regulations which easily satisfy intermediate scrutiny. In determining whether a regulation is content-based or content-neutral, the “principal inquiry . . . is whether the government adopted a regulation of speech because of [agreement or] disagreement with the message it conveys.” The open Internet rules adopted today apply independent of content or viewpoint. Instead, they are triggered by a broadband provider offering broadband Internet access services. The rules are structured to operate in such a way that no speaker’s message is either favored or disfavored, i.e. content neutral.

554. A content-neutral regulation will survive intermediate scrutiny if “it furthers an important or substantial government interest . . . unrelated to the suppression of free expression,” and if “the means chosen” to achieve that interest “do not burden substantially more speech than is necessary.” The government interests underlying this Order are clear and numerous. Congress has expressly tasked the Commission with “encourag[ing] the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans,” and has elsewhere explained that it is the policy of the United

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<sup>1710</sup> 47 U.S.C. § 230(c)(1) (“[N]o provider or user of an interactive computer service shall be treated as the publisher or speaker of any information provided by another information content provider.”).

States to “promote the continued development of the Internet and other interactive computer services and other interactive media.” Additionally, the *Verizon* court accepted the Commission’s finding that “Internet openness fosters the edge-provider innovation that drives [the] ‘virtuous cycle.’” [T]his Order pursues these government interests by preserving an open Internet to encourage competition and remove impediments to infrastructure investment, while enabling consumer choice, end-user control, free expression, and the freedom to innovate without permission.

555. Indeed, rather than burdening free speech, the rules we adopt today ensure that the Internet promotes speech by ensuring a level playing field for a wide variety of speakers who might otherwise be disadvantaged. As *Turner I* affirmed “assuring that the public has access to a multiplicity of information sources is a governmental purpose of the highest order, for it promotes values central to the First Amendment.” Based on clear legislative interest in furthering broadband deployment and the paramount government interest in assuring that the public has access to a multiplicity of information sources, these interests clearly qualify as substantial under intermediate scrutiny.

556. Additionally, the rules here are sufficiently tailored to accomplish these government interests. The effect on speech imposed by these rules is minimal. The rules do not “burden substantially more speech than necessary” because they do not burden any identifiable speech—the rules we adopt today apply only to broadband providers’ conduct with regard to their broadband Internet access services. Providers remain free to engage in the full panoply of protected speech afforded to any other speaker. They are free to offer “edited” services and engage in expressive conduct through the provision of other data services, as well.

### NOTES & QUESTIONS

1. *The economic case for neutrality*. What does the FCC mean when it mentions the “virtuous cycle” created by the open Internet rules? Who benefits from the virtuous cycle? Can you give examples of similar cycles happening in the past? Would the broadband providers benefit from this cycle? If so, why do they oppose the rules?

2. *Not so nascent anymore.* When the FCC issued the open Internet rules back in 2010 the agency distinguished between “fixed” and “mobile” providers. How has the agency’s approach changed in the new rules? What is the FCC’s justification for this change? Do you think this change makes sense? Who will benefit from this change and what might the impact be on the market for mobile broadband service? On the market for mobile apps?

3. *Setting network priorities.* The Open Internet rules prohibit “paid prioritization” regardless of whether it could be considered a “reasonable network management” practice. How do you think this will affect existing services? Will removing “fast lanes” make things run more or less smoothly from the user’s perspective?

a. *But how will this impact my binge watching?* Consider a service like Netflix, which accounts for more than 35% of all “primetime” Internet bandwidth and requires constant and high speeds to deliver high resolution streaming video.\* Service providers have been accused of intentionally slowing down Netflix traffic, but the “speed” of streaming services is dependent on many factors, including the location and quality of the connection between the content provider (Netflix) and the ISP. How do you think the FCC should determine whether a broadband service provider is violating the paid prioritization rule?

b. *Who pays for interconnection?* What exactly does the “no paid prioritization” rule prohibit? We have discussed the relationships between broadband service providers (Comcast), information service providers (Netflix), and customers, but those are not the only companies in this ecosystem. In many cases, companies like Netflix pay “transit” providers to deliver their content to broadband providers like Comcast. But what happens when these transit providers cannot offer enough bandwidth and speed to satisfy customer demand? Broadband service providers like Comcast might offer direct connections (called “peering” agreements) to improve performance and speed.† Would a

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\* See Brian Fung, “Netflix now accounts for almost 37 percent of our Internet traffic,” Wash. Post. (May 28, 2015), <<https://www.washingtonpost.com/news/the-switch/wp/2015/05/28/netflix-now-accounts-for-almost-37-percent-of-our-internet-traffic/>>.

† See Nick Feamster, “Why Your Netflix Traffic is Slow, and Why the Open Internet Order Won’t (Necessarily) Make It Faster,” Freedom to Tinker (Mar. 25, 2015), <<https://freedom-to-tinker.com/blog/feamster/why-your-netflix-traffic-is-slow-and-why-the-open-internet-order-wont-necessarily-make-it-faster/>>.

peering agreement between Netflix and Comcast violate the paid prioritization rule? Who might complain about such an agreement? How do you think the FCC would resolve that complaint based on the open Internet rules?

c. *The price of progress.* Besides video streaming, what other kinds of Internet services do you think will trigger paid prioritization disputes? How might these services benefit from the new Open Internet rules? How might these services be negatively impacted by the rules?

d. *Still limiting scope.* How is the FCC's decision to carve out an exception for "interconnection" services similar to the agency's decision to exclude mobile broadband in 2010? How is it different? Do you think that the agency might later change its mind and decide to apply the rules to interconnection providers (as it did with mobile broadband)? If so, why?

4. *Updates.* How are the new Open Internet rules different from the rules adopted in 2010? What do you think motivated these changes?

5. *Speaking of freedom of speech.* Are the Open Internet rules vulnerable to a First Amendment challenge by a broadband provider? How does the FCC argue that these rules do not impact First Amendment interests? Do you think that broadband providers are more like telephone companies or like broadcasters? How do those analogies play into the First Amendment argument? Does it matter that Comcast and other broadband providers also host news and other content on their homepages?

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**CHAPTER 8****CLASSIFICATION**

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**p.678, insert after Note 8:**

9. *Hitting the regulatory reset button.* The advocates for “open access” did not go away after the Supreme Court’s decision in *Brand X*. After the FCC’s leadership changed in 2008, the agency itself began to push for access or “net neutrality” rules—as we know from Chapter 7: ACCESS. However, the FCC’s first two regulatory attempts were struck down by the D.C. Circuit because the court found the agency’s Title I “ancillary jurisdiction” was not adequate to justify the rules. So, in 2015, the FCC officially hit the “reset button” in the following order and reclassified certain broadband Internet service providers as common carriers under Title II.

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**PROTECTING AND PROMOTING THE OPEN INTERNET**

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25. The open Internet rules described above apply to both fixed and mobile broadband Internet access service. Consistent with the 2010 Order, today’s Order applies its rules to the consumer-facing service that broadband networks provide, which is known as “broadband Internet access service”<sup>27</sup> (BIAS) and is defined to be:

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<sup>27</sup> We note that our use of the term “broadband” in this Order includes but is not limited to services meeting the threshold for “advanced telecommunications capability,” as defined in Section 706 of the Telecommunications Act of 1996, as amended. 47 U.S.C. § 1302(b). Section 706 defines that term as “high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology.” 47 U.S.C. § 1302(d)(1). The 2015 Broadband Progress Report specifically notes that “advanced telecommunications capability,” while sometimes referred to as “broadband,” differs from the Commission’s use of the term “broadband” in other contexts. 2015 Broadband Progress Report at n.1 (rel. Feb. 4, 2015).

*A mass-market retail service by wire or radio that provides the capability to transmit data to and receive data from all or substantially all Internet endpoints, including any capabilities that are incidental to and enable the operation of the communications service, but excluding dial-up Internet access service. This term also encompasses any service that the Commission finds to be providing a functional equivalent of the service described in the previous sentence, or that is used to evade the protections set forth in this Part.*

26. As in 2010, BIAS does not include enterprise services, virtual private network services, hosting, or data storage services. Further, we decline to apply the open Internet rules to premises operators to the extent they may be offering broadband Internet access service as we define it today.

27. In defining this service we make clear that we are responding to the *Verizon* court's conclusion that broadband providers "furnish a service to edge providers" (and that this service was being treated as common carriage *per se*). As discussed further below, we make clear that broadband Internet access service encompasses this service to edge providers. Broadband providers sell retail customers the ability to go anywhere (lawful) on the Internet. Their representation that they will transport and deliver traffic to and from all or substantially all Internet endpoints includes the promise to transmit traffic to and from those Internet endpoints back to the user.

29. As discussed below, we find that broadband Internet access service is a "telecommunications service" and subject to sections 201, 202, and 208 (along with key enforcement provisions). As a result, commercial arrangements for the exchange of traffic with a broadband Internet access provider are within the scope of Title II, and the Commission will be available to hear disputes raised under sections 201 and 202 on a case-by-case basis[.]

#### B. Promoting Investment with a Modern Title II

37. Today, our forbearance approach results in over 700 codified rules being inapplicable, a "light-touch" approach for the use of Title II. This includes no unbundling of last-mile facilities, no tariffing, no rate regulation, and no cost accounting rules, which results in a carefully tailored application of only those Title II provisions found to directly further the public interest in an open Internet and more, better, and open broadband. Nor will our actions result in the imposition of any new federal taxes or fees; the ability of states to impose fees on broadband is already limited by the congressional Internet tax moratorium.

38. This is Title II tailored for the 21<sup>st</sup> Century. Unlike the application of Title II to incumbent wireline companies in the 20<sup>th</sup> Century, a swath of utility-style provisions (including tariffing) will *not* be applied. Indeed, there will be fewer sections of Title II applied than have been applied to Commercial Mobile Radio Service (CMRS), where Congress expressly required the application of Sections 201, 202, and 208, and permitted the Commission to forbear from others. In fact, Title II has never been applied in such a focused way.

39. History demonstrates that this careful approach to the use of Title II will not impede investment. First, mobile voice services have been regulated under a similar light-touch Title II approach since 1994 — and investment and usage boomed. For example, between 1993 and 2009 (while voice was the primary driver of mobile revenues), the mobile industry invested more than \$271 billion in building out networks, during a time in which industry revenues increased by 1300 percent and subscribership grew over 1600 percent. Moreover, more recently, Verizon Wireless has invested tens of billions of dollars in deploying mobile wireless services since being subject to the 700 MHz C Block open access rules, which overlap in significant parts with the open Internet rules we adopt today. But that is not all. Today, key provisions of Title II apply to certain enterprise broadband services that AT&T has described as “the epicenter of the broadband investment” the Commission seeks to promote. 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. And, of course, wireline DSL was regulated as a common-carrier service until 2005—including a period in the late ‘90s and the first five years of this century that saw the highest levels of wireline broadband infrastructure investment to date.

40. In any event, recent events have demonstrated that our rules will not disrupt capital markets or investment. Following recent discussions of the potential application of Title II to consumer broadband, investment analysts have issued reports concluding that Title II with appropriate forbearance is unlikely to alter broadband provider conduct or have any negative effect on their value or future profitability. Executives from large broadband providers have also repeatedly represented to investors that the prospect of regulatory action will not influence their investment strategies or long-term profitability; indeed, Sprint has gone so far to say that it “does not believe that a light touch application of

Title II, including appropriate forbearance, would harm the continued investment in, and deployment of, mobile broadband services.” Finally, the recent AWS auction, conducted under the prospect of Title II regulation, generated bids (net of bidding credits) of more than \$41 billion—further demonstrating that robust investment is not inconsistent with a light-touch Title II regime.

### C. Sustainable Open Internet Rules

41. We ground our open Internet rules in multiple sources of legal authority—including both section 706 and Title II of the Communications Act. The *Verizon* court upheld the Commission’s use of section 706 as a substantive source of legal authority to adopt open Internet protections. But it held that, “[g]iven the Commission’s still-binding decision to classify broadband providers . . . as providers of ‘information services,’” open Internet protections that regulated broadband providers as common carriers would violate the Act. Rejecting the Commission’s argument that broadband providers only served retail consumers, the *Verizon* court went on to explain that “broadband providers furnish a service to edge providers, thus undoubtedly functioning as edge providers’ ‘carriers,’” and held that the 2010 no blocking and no unreasonable discrimination rules impermissibly “obligated [broadband providers] to act as common carriers.”

42. The *Verizon* decision thus made clear that section 706 affords the Commission substantive authority, and that open Internet protections are within the scope of that authority. And this Order relies on section 706 for the open Internet rules. But, in light of *Verizon*, absent a classification of broadband providers as providing a “telecommunications service,” the Commission could only rely on section 706 to put in place open Internet protections that steered clear of regulating broadband providers as common carriers *per se*. Thus, in order to bring a decade of debate to a certain conclusion, we conclude that the best path is to rely on all available sources of legal authority—while applying them with a light touch consistent with further investment and broadband deployment. Taking the *Verizon* decision’s implicit invitation, we revisit the Commission’s classification of the retail broadband Internet access service as an information service and clarify that this service encompasses the so-called “edge service.”

43. Exercising our delegated authority to interpret ambiguous terms in the Communications Act, as confirmed by the Supreme Court in *Brand X*, today’s

Order concludes that the facts in the market today are very different from the facts that supported the Commission's 2002 decision to treat cable broadband as an information service and its subsequent application to fixed and mobile broadband services. Those prior decisions were based largely on a factual record compiled over a decade ago, during an earlier time when, for example, many consumers would use homepages supplied by their broadband provider. In fact, the *Brand X* Court explicitly acknowledged that the Commission had previously classified the transmission service, which broadband providers offer, as a telecommunications service and that the Commission could return to that classification if it provided an adequate justification. . . . As the record reflects, times and usage patterns have changed and it is clear that broadband providers are offering both consumers and edge providers straightforward transmission capabilities that the Communications Act defines as a "telecommunications service."

44. The *Brand X* decision made famous the metaphor of pizza delivery. Justice Scalia, in dissent, concluded that the Commission had exceeded its legal authority by classifying cable-modem service as an "information service." To make his point, Justice Scalia described a pizzeria offering delivery services as well as selling pizzas and concluded that, similarly—broadband providers were offering "telecommunications services" even if that service was not offered on a "stand-alone basis."

45. To take Justice Scalia's metaphor a step further, suppose that in 2014, the pizzeria owners discovered that other nearby restaurants did not deliver their food and thus concluded that the pizza-delivery drivers could generate more revenue by delivering from any neighborhood restaurant (including their own pizza some of the time). Consumers would clearly understand that they are being offered a delivery service.

46. Today, broadband providers are offering stand-alone transmission capacity and that conclusion is not changed even if, as Justice Scalia recognized, other products may be offered at the same time. The trajectory of technology in the decade since the *Brand X* decision has been towards greater and greater modularity. For example, consumers have considerable power to combine their mobile broadband connections with the device, operating systems, applications, Internet services, and content of their choice. Today, broadband Internet access service is fundamentally understood by customers as a

transmission platform through which consumers can access third-party content, applications, and services of their choosing.

47. Based on this updated record, this Order concludes that the retail broadband Internet access service available today is best viewed as separately identifiable offers of (1) a broadband Internet access service that is a telecommunications service (including assorted functions and capabilities used for the management and control of that telecommunication service) and (2) various “add-on” applications, content, and services that generally are information services. This finding more than reasonably interprets the ambiguous terms in the Communications Act, best reflects the factual record in this proceeding, and will most effectively permit the implementation of sound policy consistent with statutory objectives, including the adoption of effective open Internet protections.

48. This Order also revisits the Commission’s prior classification of mobile broadband Internet access service as a private mobile service, which cannot be subject to common carrier regulation, and finds that it is best viewed as a commercial mobile service or, in the alternative, the functional equivalent of commercial mobile service. Under the statutory definition, commercial mobile services must be “interconnected with the public switched network (as such terms are defined by regulation by the Commission).”<sup>44</sup> Consistent with that delegation of authority to define these terms, and with the Commission’s previous recognition that the public switched network will grow and change over time, this Order updates the definition of public switched network to reflect current technology, by including services that use public IP addresses. Under this revised definition, the Order concludes that mobile broadband Internet access service is interconnected with the public switched network. In the alternative, the Order concludes that mobile broadband Internet access service is the functional equivalent of commercial mobile service because, like commercial mobile service, it is a widely available, for profit mobile service that offers mobile subscribers the capability to send and receive communications, including voice, on their mobile device.

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<sup>44</sup> 47 U.S.C. § 332(d)(2).

49. By classifying broadband Internet access service under Title II of the Act, in our view the Commission addresses any limitations that past classification decisions placed on the ability to adopt strong open Internet rules, as interpreted by the D.C. Circuit in the *Verizon* case.

50. Having classified broadband Internet access service as a telecommunications service, we respond to the *Verizon* court's holding, supporting our open Internet rules under the Commission's Title II authority and removing any common carriage limitation on the exercise of our section 706 authority. For mobile broadband services, we also ground the open Internet rules in our Title III authority to protect the public interest through the management of spectrum licensing.

#### D. Broad Forbearance

51. In finding that broadband Internet access service is subject to Title II, we simultaneously exercise the Commission's forbearance authority to forbear from 30 statutory provisions and render over 700 codified rules inapplicable, to establish a light-touch regulatory framework tailored to preserving those provisions that advance our goals of more, better, and open broadband. We thus forbear from the vast majority of rules adopted under Title II. We do not, however, forbear from sections 201, 202, and 208 (or from related enforcement provisions),<sup>46</sup> which are necessary to support adoption of our open Internet rules. We also grant extensive forbearance, minimizing the burdens on broadband providers while still adequately protecting the public.

52. In addition, we do not forbear from a limited number of sections necessary to ensure consumers are protected, promote competition, and advance universal access, all of which will foster network investment, thereby helping to promote broadband deployment.

53. *Section 222: Protecting Consumer Privacy.* Ensuring the privacy of customer information both directly protects consumers from harm and eliminates consumer concerns about using the Internet that could deter broadband de-

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<sup>46</sup> Specifically, we do not forbear from the enforcement authorities set forth in sections 206, 207, 208, 209, 216, and 217. To preserve existing CALEA obligations that already apply to broadband Internet access service, we also decline to forbear from section 229. 47 U.S.C. § 229. See also 47 C.F.R. §§ 1.20000 et seq.

ployment. Among other things, section 222 imposes a duty on every telecommunications carrier to take reasonable precautions to protect the confidentiality of its customers' proprietary information.

54. As the Commission has recognized, “[c]onsumers’ privacy needs are no less important when consumers communicate over and use broadband Internet access than when they rely on [telephone] services.” Thus, this Order finds that consumers concerned about the privacy of their personal information will be more reluctant to use the Internet, stifling Internet service competition and growth. Application of section 222’s protections will help spur consumer demand for those Internet access services, in turn “driving demand for broadband connections, and consequently encouraging more broadband investment and deployment,” consistent with the goals of the 1996 Act.<sup>51</sup>

55. *Sections 225/255/251(a)(2): Ensuring Disabilities Access.* We do not forbear from those provisions of Title II that ensure access to broadband Internet access service by individuals with disabilities.

56. *Section 224: Ensuring Infrastructure Access.* For broadband Internet access service, we do not forbear from section 224 and the Commission’s associated procedural rules (to the extent they apply to telecommunications carriers and services and are, thus, within the Commission’s forbearance authority). . . . Access to poles and other infrastructure is crucial to the efficient deployment of communications networks including, and perhaps especially, new entrants.

57. *Section 254: Promoting Universal Broadband.* Section 254 promotes the deployment and availability of communications networks to all Americans, including rural and low-income Americans—furthering our goals of more and better broadband. [We conclude] that directly applying section 254 provides both more legal certainty . . . and more flexibility going forward.

58. We partially forbear from section 254(d) and associated rules insofar as they would immediately require mandatory universal service contributions associated with broadband Internet access service.

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<sup>51</sup> 2007 CPNI Order, 22 FCC Rcd at 6957, para. 59; see also FCC, Connecting America: The National Broadband Plan at 55 (National Broadband Plan) (explaining that without privacy protections, new innovation and investment in broadband applications and content may be held back, and these applications and content, in turn, are likely the most effective means to advance many of Congress’s goals for broadband).

#### IV. DECLARATORY RULING: CLASSIFICATION OF BROADBAND INTERNET ACCESS SERVICES

##### B. Rationale for Revisiting the Commission's Classification of Broadband Internet Access Services

328. We now find it appropriate to revisit the classification of broadband Internet access service as an information service. The Commission has steadily and consistently worked to protect the open Internet for the last decade, starting with the adoption of the *Internet Policy Statement* up through its recent *2014 Open Internet NPRM* following the D.C. Circuit's *Verizon* decision. Although the *Verizon* court accepted the Commission's interpretation of section 706 as an independent grant of authority over broadband services, it nonetheless vacated the no-blocking and antidiscrimination provisions of the *Open Internet Order*. As the *Verizon* decision explained, to the extent that conduct-based rules remove broadband service providers' ability to enter into individualized negotiations with edge providers, they impose *per se* common carrier status on broadband Internet access service providers, and therefore conflict with the Commission's prior designation of broadband Internet access services as information services. Thus, absent a finding that broadband providers were providing a "telecommunications service," the D.C. Circuit's *Verizon* decision defined the bounds of the Commission's authority to adopt open Internet protections to those that do not amount to common carriage.

329. The *Brand X* Court emphasized that the Commission has an obligation to consider the wisdom of its classification decision on a continuing basis. An agency's evaluation of its prior determinations naturally includes consideration of the law affecting its ability to carry out statutory policy objectives. As discussed above, the record in the *Open Internet* proceeding demonstrates that broadband providers continue to have the incentives and ability to engage in practices that pose a threat to Internet openness, and as such, rules to protect the open nature of the Internet remain necessary. To protect the open Internet, and to end legal uncertainty, we must use multiple sources of legal authority to protect and promote Internet openness, to ensure that the Internet continues to grow as a platform for competition, free expression, and innovation; a driver of economic growth; and an engine of the virtuous cycle of broadband deployment, innovation, and consumer demand. Thus, we now find it appropriate to examine how broadband Internet access services are provided today.

330. Changed factual circumstances cause us to revise our earlier classification of broadband Internet access service based on the voluminous record developed in response to the *2014 Open Internet NPRM*. In the 2002 *Cable Modem Declaratory Ruling*, the Commission observed that “the cable modem service business is still nascent, and the shape of broadband deployment is not yet clear. Business relationships among cable operators and their service offerings are evolving.” [T]he premises underlying that decision have changed. As the record demonstrates and we discuss in more detail below, we are unable to maintain our prior finding that broadband providers are offering a service in which transmission capabilities are “inextricably intertwined” with various proprietary applications and services. Rather, it is more reasonable to assert that the “indispensable function” of broadband Internet access service is “the connection link that in turn enables access to the essentially unlimited range of Internet-based services.” This is evident, as discussed below, from: (1) consumer conduct, which shows that subscribers today rely heavily on third-party services, such as email and social networking sites, even when such services are included as add-ons in the broadband Internet access provider’s service; (2) broadband providers’ marketing and pricing strategies, which emphasize speed and reliability of transmission separately from and over the extra features of the service packages they offer; and (3) the technical characteristics of broadband Internet access service. We also note that the predictive judgments on which the Commission relied in the *Cable Modem Declaratory Ruling* anticipating vibrant intermodal competition for fixed broadband cannot be reconciled with current marketplace realities.

### C. Classification of Broadband Internet Access Service

331.[We] conclude that broadband Internet access service is a telecommunications service subject to our regulatory authority under Title II of the Communications Act regardless of the technological platform over which the service is offered. We both revise our prior classifications of wired broadband Internet access service and wireless broadband Internet access service, and classify broadband Internet access service provided over other technology platforms. In doing so, we exercise the well-established power of federal agencies to interpret ambiguous provisions in the statutes they administer.

332. The Court’s application of this *Chevron* test in *Brand X* makes clear our delegated authority to revisit our prior interpretation of ambiguous statutory terms and reclassify broadband Internet access service as a telecommunications service[.]

333. Furthermore, reading the *Brand X* majority, concurring, and dissenting opinions together, it is apparent that most, and perhaps all, of the nine Justices believed that it would have been at least permissible under the Act to have classified the transmission service included with wired Internet access service as a telecommunications service[.]

334. It is also well settled that we may reconsider, on reasonable grounds, the Commission’s earlier application of the ambiguous statutory definitions of “telecommunications service” and “information service[.]”

#### 1. *Scope*

336. As discussed below, we conclude that broadband Internet access service is a telecommunications service. We define “broadband Internet access service” as a mass-market<sup>879</sup> retail service by wire or radio that provides the capability to transmit data to and receive data from all or substantially all Internet endpoints, including any capabilities that are incidental to and enable the operation of the communications service, but excluding dial-up Internet access service. This term also encompasses any service that the Commission finds to be providing a functional equivalent of the service described in the previous sentence.

337. The term “broadband Internet access service” includes services provided over any technology platform, including but not limited to wire, terrestrial wireless (including fixed and mobile wireless services using licensed or unlicensed spectrum), and satellite. For purposes of our discussion, we divide the various forms of broadband Internet access service into the two categories of “fixed” and “mobile,” rather than between “wired” and “wireless” service. With these two categories of services—fixed and mobile—we intend to cover the entire universe of Internet access services at issue in the Commission’s prior broadband classification decisions as well as all other broadband Internet access services offered over other technology platforms that were not

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<sup>879</sup> By mass market, we mean services marketed and sold on a standardized basis to residential customers, small businesses, and other end-user customers such as schools and libraries.

addressed by prior classification orders. We also make clear that our classification finding applies to all providers of broadband Internet access service, as we delineate them here, regardless of whether they lease or own the facilities used to provide the service. “Fixed” broadband Internet access service refers to a broadband Internet access service that serves end users primarily at fixed endpoints using stationary equipment, such as the modem that connects an end user’s home router, computer, or other Internet access device to the network. The term encompasses the delivery of fixed broadband over any medium, including various forms of wired broadband services (e.g., cable, DSL, fiber), fixed wireless broadband services (including fixed services using unlicensed spectrum), and fixed satellite broadband services. “Mobile” broadband Internet access service refers to a broadband Internet access service that serves end users primarily using mobile stations. Mobile broadband Internet access includes, among other things, services that use smartphones or mobile-network-enabled tablets as the primary endpoints for connection to the Internet. The term also encompasses mobile satellite broadband services.

338. [T]he Commission agrees that a two-sided market exists and that the beneficiaries of the non-consumer side either are or potentially could be all edge providers. Because our reclassification decision treats BIAS as a Title II service, Title II applies, as well, to the second side of the market, which is always a part of, and subsidiary to, the BIAS service. . . . The reclassification of BIAS as a Title II service thus addresses the court’s conclusion that “the Commission would violate the Communications Act were it to regulate broadband providers as common carriers.”

339. Many commenters, while holding vastly different views on our reclassification of BIAS, are united in the view we need not reach the regulatory classification of the service that the *Verizon* court identified as being furnished to the edge. We agree. Our reclassification of the broadband Internet access service means that we can regulate, consistent with the Communications Act, broadband providers to the extent they are “engaged” in providing the broadband Internet access service. . . . For example, where an edge provider attempts to purchase favorable treatment for its traffic (such as through zero rating), that treatment would be experienced by the BIAS subscriber (such as through an exemption of the edge-provider’s data from a usage limit) and the impact on the BIAS subscriber, if any, would be assessed under Title II. That is, the legal question before the Commission turns on whether the provision of that service

to the edge provider would be inconsistent with the provision of the retail service under Title II[.]

340. Broadband Internet access service does not include virtual private network (VPN) services, content delivery networks (CDNs), hosting or data storage services, or Internet backbone services. . . . Finally, we observe that to the extent that coffee shops, bookstores, airlines, private end-user networks such as libraries and universities, and other businesses acquire broadband Internet access service from a broadband provider to enable patrons to access the Internet from their respective establishments, provision of such service by the premise operator would not itself be considered a broadband Internet access service unless it was offered to patrons as a retail mass market service, as we define it here[.]

## *2. The Market Today: Current Offerings of Broadband Internet Access Service*

341. [T]he record in this proceeding leads us to the conclusion that providers today market and offer consumers separate services that are best characterized as (1) a broadband Internet access service that is a telecommunications service; and (2) “add-on” applications, content, and services that are generally information services.

### *b. The Growth of Consumer Demand and Market Supply*

346. The record in this proceeding reveals that, since we collected information to address the classification of cable modem service over a decade ago, the market for both fixed and mobile broadband Internet access service has changed dramatically. Between December 2000 and December 2013, the number of residential Internet connections with speeds over 200 kbps in at least one direction increased from 5.2 million to 87.6 million. In 2000, only 5 percent of American households had a fixed Internet access connection with speeds of over 200 kbps in at least one direction, as compared to approximately 72 percent of American households with this same connection today. Indeed, as of December 2013, 60 percent of households have a fixed Internet connection with minimum speeds of at least 3 Mbps/768 kbps. Moreover, between December 2009 and December 2013, the number of mobile handsets with a residential data plan with a speed of at least 200 kbps in one direction increased from 43.7 million to 159.2 million, a 265 percent increase. By November 2014, 73.6 percent of the entire U.S. age 13+ population was communicating with smart phones, a figure which has continued to rise rapidly over the past several

years. Cisco forecasts that by 2019, North America will have nearly 90 percent of its installed base converted to smart devices and connections, and smart traffic will grow to 97 percent of the total global mobile traffic. In 2013, the United States and Canada were home to almost 260 million mobile subscriptions for smartphones, mobile PCs, tablets, and mobile routers. In 2014, that number was expected to increase by 20 percent, to 300 million subscriptions; by 2020, to 450 million, or a population penetration rate of almost 124 percent. In addition, the explosion in the deployment of Wi-Fi technology in the past few years has resulted in consumers increasingly using that technology to access third party content, applications, and services on the Internet, in connection with either a fixed broadband service or a mobile broadband service.

347. [A]s more American households have gained access to broadband Internet access service, the market for Internet-based services provided by parties other than broadband Internet access providers has flourished. . . . In early 2003, a year after the *Cable Modem Declaratory Ruling*, there were approximately 36 million websites. Today there are an estimated 900 million. When the Commission assessed the cable modem service market in the *Cable Modem Declaratory Ruling*, the service at issue was offered with various online applications, including e-mail, newsgroups, and the ability to create a web page. The Commission observed that subscribers to cable modem services “usually d[id] not need to contract separately” for “discrete services or applications” such as e-mail. Today, broadband service providers still provide various Internet applications, including e-mail, online storage, and customized homepages, in addition to newer services such as music streaming and instant messaging. But consumers are very likely to use their high-speed Internet connections to take advantage of competing services offered by third parties.

349. More generally, both fixed and mobile consumers today largely use their broadband Internet access connections to access content and services that are unaffiliated with their broadband Internet access service provider. . . . Overall, broadband providers themselves operate very few of the websites that broadband Internet access services are most commonly used to access.

350. Thus, as a practical matter, broadband Internet access service is useful to consumers today primarily as a conduit for reaching modular content, applications, and services that are provided by unaffiliated third parties. Indeed, the ability to transmit data to and from Internet endpoints has become

the “one indispensable function” that broadband Internet access service uniquely provides.

*c. Marketing*

351. That broadband Internet access services today are primarily offerings of Internet connectivity and transmission capability is further evident by how these services are marketed and priced. [F]ixed broadband providers use transmission speeds to classify tiers of service offerings and to distinguish their offerings from those of competitors. [M]obile broadband providers similarly emphasize transmission speed as well as reliability and coverage as factors that characterize their mobile broadband Internet access service offering.

352. [These advertisements] link higher transmission speeds and service reliability with enhanced access to the Internet at large—to any “points” a user may wish to reach<sup>957</sup>—not only to Internet-based applications or services that are provided in conjunction with broadband access. . . . Broadband providers also market access to the Internet through Wi-Fi.

353. Fixed and mobile broadband Internet access service providers also price and differentiate their service offerings on the basis of the quality and quantity of data transmission the offering provides. . . . On the mobile side, monthly data allowances—i.e., caps on the amount of data a user may transmit to and from Internet endpoints—are among the features that factor most heavily in the pricing of service plans.

354. In short, broadband Internet access service is marketed today primarily as a conduit for the transmission of data across the Internet. The record suggests that fixed broadband Internet access service providers market distinct service offerings primarily on the basis of the transmission speeds associated with each offering. Similarly, mobile providers market their service offerings primarily on the basis of the speed, reliability, and coverage of their network. Marketing broadband services in this way leaves a reasonable consumer with the impression that a certain level of transmission capability—measured in terms of “speed” or “reliability”—is being offered in exchange for the subscription fee, even if complementary services are also included as part of the offer.

*3. Broadband Internet Access Service Is a Telecommunications Service*

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<sup>957</sup> See 47 U.S.C. § 153(50) (definition of “telecommunications”).

355. We now turn to applying the statutory terms at issue in light of our updated understanding of how both fixed and mobile broadband Internet access services are offered. Three definitional terms are critical to a determination of the appropriate classification of broadband Internet access service. First, the Act defines “telecommunications” as “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.” Second, the Act defines “telecommunications service” as “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.”<sup>967</sup> Finally, “information service” is defined in the Act as “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.”<sup>968</sup> We observe that the critical distinction between a telecommunications and an information service turns on what the provider is “offering.” If the offering meets the statutory definition of telecommunications service, then the service is also necessarily a common carrier service.<sup>969</sup>

356. In reconsidering our prior decisions and reaching a different conclusion, we find that this result best reflects the factual record in this proceeding, and will most effectively permit the implementation of sound policy consistent with statutory objectives. [W]e find that broadband Internet access service, as offered by both fixed and mobile providers, is best seen, and is in fact most commonly seen, as an offering (in the words of Justice Scalia, dissenting in *Brand X*) “consisting of two separate things”: “*both* ‘high-speed access to

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<sup>967</sup> Id. § 153(53).

<sup>968</sup> Id. § 153(24).

<sup>969</sup> See Universal Service First Report and Order, 12 FCC Rcd at 9177, para. 785 (“We find that the definition of ‘telecommunications services’ in which the phrase ‘directly to the public’ appears is intended to encompass only telecommunications provided on a common carrier basis.”); U.S. Telecom Ass’n v. FCC, 295 F.3d at 1328-29 (telecommunications carriers limited to common carriers); Cable & Wireless, PLC, Order, 12 FCC Rcd 8516, 8521, para. 13 (1997) (“[T]he definition of telecommunications services is intended to clarify that telecommunications services are common carrier services.”).

the Internet’ *and* other ‘applications and functions.’” . . . We also find that domain name service (DNS)<sup>972</sup> and caching,<sup>973</sup> when provided with broadband Internet access services, fit squarely within the telecommunications systems management exception to the definition of “information service.”<sup>974</sup> Thus, when provided with broadband Internet access services, these integrated services do not convert broadband Internet access service into an information service.

357. *The Commission Does Not Bear a Special Burden in This Proceeding.* Opponents of classifying broadband Internet access service as a telecommunications service advocate a narrow reading of the Supreme Court’s decision in *Brand X*. They contend that the Court’s decision to affirm the classification of cable modem service as an information service was driven by specific factual findings concerning DNS and caching, and argue that the Commission may not revisit its decision unless it can show that the facts have changed. Opponents also cite a passage from the Supreme Court’s *Fox* decision suggesting that an agency must provide “a more detailed justification than what would suffice for a new policy on a blank slate” where the agency’s “new policy rests upon factual findings that contradict those which underlay its prior policy,” or “when its prior policy has engendered serious reliance interests that must be taken into account.”

358. We disagree with these commenters on both counts. The *Fox* court explained that in these circumstances, “it is not that further justification is demanded by the mere fact of policy change; but that a reasoned explanation is needed for disregarding facts and circumstances that underlay or were engendered by the prior policy.” As the D.C. Circuit more recently confirmed,

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<sup>972</sup> DNS is most commonly used to translate domain names, such as “nytimes.com,” into numerical IP addresses that are used by network equipment to locate the desired content. See Cable Modem Declaratory Ruling, 17 FCC Rcd at 4810, para. 17 n.74; see also *Brand X*, 545 U.S. at 987, 999.

<sup>973</sup> Caching is the storing of copies of content at locations in a network closer to subscribers than the original source of the content. This enables more rapid retrieval of information from websites that subscribers wish to see most often. See Cable Modem Declaratory Ruling, 17 FCC Rcd at 4810, para. 17 n.76.

<sup>974</sup> See 47 U.S.C. § 153(24) (“The term ‘information service’ . . . does not include any use of any such capability for the management, control, or operation of a telecommunications system of the management of a telecommunications service.”). Hereinafter, we refer to this exception as the “telecommunications systems management” exception.

“[t]his does not . . . equate to a ‘heightened standard’ for reasonableness.” The Commission need only show “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.

360. In *Fox*, the Supreme Court also suggested that an agency may need to provide “a more detailed justification” for a change in policy when the prior policy “has engendered serious reliance interests.” Opponents of reclassification contend that broadband providers have invested billions of dollars to deploy new broadband network facilities in reliance on the Title I classification decisions and it would be unreasonable to change course now. We disagree. As a factual matter, the regulatory status of broadband Internet access service appears to have, at most, an indirect effect (along with many other factors) on investment. [T]he history of the *Computer Inquiries* indicates that, at a minimum the regulatory status of these or similar offerings involved a highly regulated activity for many years. . . . The legal status of the information service classification [has] been called into question too consistently to have engendered such substantial reliance interests that our reclassification decision cannot now be sustained absent extraordinary justifications. Finally, the forbearance relief we grant in the accompanying order in conjunction with our reclassification decision keeps the scope of our proposed regulatory oversight within the same general boundaries that the Commission earlier anticipated drawing under its Title I authority.

*a. Broadband Internet Access Service Involves Telecommunications*

361. *Broadband Internet Access Service Transmits Information of the User’s Choosing Between Points Specified by the User.* [I]t is clear that broadband Internet access service is providing “telecommunications.” Users rely on broadband Internet access service to transmit “information of the user’s choosing,” “between or among points specified by the user.” Time Warner Cable asserts that broadband Internet access service cannot be a telecommunications service because—as end users do not know where online content is stored—Internet communications allegedly do not travel to “points specified by the user” within the statutory definition of “telecommunications.” We disagree. We find that the term “points specified by the user” is ambiguous, and conclude that uncertainty concerning the geographic location of an endpoint of communication is irrelevant for the purpose of determining whether a broadband Internet access service is providing “telecommunications.” Although Internet

users often do not know the geographic location of edge providers or other users, there is no question that users specify the end points of their Internet communications. . . . Likewise, numerous forms of telephone service qualify as telecommunications even though the consumer typically does not know the geographic location of the called party. . . . More generally, we have never understood the definition of “telecommunications” to require that users specify—or even know—information about the routing or handling of their transmissions along the path to the end point, nor do we do so now.

362. *Information is Transmitted Without Change in Form or Content.* Broadband Internet access service may use a variety of protocols to deliver content from one point to another. However, the packet payload (*i.e.*, the content requested or sent by the user) is not altered by the variety of headers that a provider may use to route a given packet. The information that a broadband provider places into a packet header as part of the broadband Internet access service is for the management of the broadband Internet access service and it is removed before the packet is handed over to the application at the destination.<sup>1003</sup> Broadband providers thus move packets from sender to recipient without any change in format or content, and “merely transferring a packet to its intended recipient does not by itself involve generating, acquiring, transforming, processing, retrieving, utilizing, or making available information.” Rather, “it is the nature of [packet delivery] that the ‘form and content of the information’ is precisely the same when an IP packet is sent by the sender as when that same packet is received by the recipient.”

*b. Broadband Internet Access Service is a “Telecommunications Service”*

363. Having affirmatively determined that broadband Internet access service involves “telecommunications,” we also find that broadband Internet access service is a “telecommunications service.” A “telecommunications service” is the “offering of telecommunications for a fee directly to the public, . . . regardless of the facilities used.”<sup>1006</sup> We find that broadband Internet access service providers offer broadband Internet access service “directly to the public.” [T]he record indicates that broadband providers routinely market broadband Internet access services widely and to the general public. Because a

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<sup>1003</sup> See Internet Engineering Task Force, Requirements for Internet Hosts – Communications Layers, RFC 1122 (Oct. 1989), <https://tools.ietf.org/html/rfc1122>.

<sup>1006</sup> 47 U.S.C. § 153(53).

provider is a common carrier “by virtue of its functions,” we find that such offerings are made directly to the public within the Act’s definition of telecommunications service. We draw this conclusion based upon the common circumstances under which providers offer the service, and we reject the suggestion that we must evaluate such offerings on a narrower carrier-by-carrier or geographic basis. Further, that some broadband providers require potential broadband customers to disclose their addresses and service locations before viewing such an offer does not change our conclusion. The Commission has long maintained that offering a service to the public does not necessarily require holding it out to all end users. Some individualization in pricing or terms is not a barrier to finding that a service is a telecommunications service.

364. [B]roadband providers hold themselves out to carry all edge provider traffic to the broadband provider’s end user customers regardless of source and regardless of whether the edge provider itself has a specific arrangement with the broadband provider. . . . We recognize that there are some interconnection agreements that do contain more individualized terms and conditions. However, this circumstance is not inherently different from similarly individualized commercial agreements for certain enterprise broadband services, which the Commission has long held to be common carriage telecommunications services subject to Title II. That the individualized terms may be negotiated does not change the underlying fact that a broadband provider holds the *service* out directly to the public.

*c. Broadband Internet Access Service is Not an “Information Service”*

365. We further find that broadband Internet access service is not an information service. The Act defines “information service” as “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.”<sup>1023</sup> To the extent that broadband Internet access service is offered along with some capabilities that would otherwise fall within the information service definition, they do not turn broadband Internet access service into a functionally integrated information service. To the contrary, we find

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<sup>1023</sup> 47 U.S.C. § 153(24).

these capabilities either fall within the telecommunications systems management exception or are separate offerings that are not inextricably integrated with broadband Internet access service, or both.

366. *DNS Falls Within the Telecommunications Systems Management Exception to the Definition of Information Services.* As the Supreme Court spotlighted in *Brand X*, the Commission predicated its prior conclusion that cable modem service was an integrated information service at least in part on the view that it “transmits data *only* in connection with the further processing of information.” That was so, under the theory of the *Cable Modem Declaratory Ruling*, because “[a] user cannot reach a third-party’s Web site without DNS, which (among other things) matches the Web site address the end user types into his browser (or ‘clicks’ on with his mouse) with the IP address of the Web page’s host server.” The Commission had assumed without analysis that DNS, when provided with Internet access service, is an information service. The Commission credited record evidence that DNS “enable[s] routing” and that “[w]ithout this service, Internet access would be impractical for most users.” In his *Brand X* dissent, however, Justice Scalia correctly observed that DNS “is scarcely more than *routing* information, which is expressly excluded from the definition of ‘information service’” by the telecommunications systems management exception set out in the last clause of section 3(24) of the Act.

367. Although the Commission assumed in the *Cable Modem Declaratory Ruling—sub silentio*—that DNS fell outside the telecommunications systems management exception,<sup>1028</sup> Justice Scalia’s assessment finds support both in the language of section 3(24), and in the Commission’s consistently held view that “adjunct-to-basic” functions fall within the telecommunications systems management exception to the “information service” definition. Such functions, the Commission has held: (1) must be “incidental” to an underlying telecommunications service—*i.e.*, “‘basic’ in purpose and use” in the sense that they facilitate use of the network; and (2) must “not alter the fundamental character

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<sup>1028</sup> See *Cable Modem Declaratory Ruling*, 17 FCC Rcd at 4822, para. 38 n.150 (containing a passing reference to the telecommunications systems management exception). The Commission’s subsequent conclusions that wireline broadband services offered by telephone companies and broadband offered over power lines were unitary information services followed the same theory, also without any analysis of the telecommunications systems management exception. See *Wireline Broadband Classification Order*, 20 FCC Rcd at 14864, para. 15; *BPL-Enabled Broadband Order*, 21 FCC Rcd at 13284-87, paras. 5-9.

of [the telecommunications service].” By established Commission precedent, they include “speed dialing, call forwarding, [and] computer-provided directory assistance,” each of which shares with DNS the essential characteristic of using computer processing to convert the number or keystroke that the end user enters into another number capable of routing the communication to the intended recipient. Similarly, traditional voice telephone calls to toll free numbers, pay-per-call numbers, and ported telephone numbers require a database query to translate the dialed telephone number into a different telephone number and/or to otherwise determine how to route the call properly, and there is no doubt that the inclusion of that functionality does not somehow convert the basic telecommunications service offering into an information service.<sup>1033</sup>

368. [AT&T] argues that DNS must fall outside of the telecommunications systems management exception because “Internet access providers use DNS functionality not merely (or even primarily) to ‘manage’ their networks more efficiently, but to make the Internet as a whole easily accessible and convenient *for their subscribers*.” We disagree. [DNS] allows more efficient use of the telecommunications network by facilitating accurate and efficient routing from the end user to the receiving party.

370. Although we find that DNS falls within the telecommunications systems management exception, even if did not, DNS functionality is not so inextricably intertwined with broadband Internet access service so as to convert the entire service offering into an information service. First, the record indicates that “IP packet transfer does work just as well without DNS, but is simply less useful, just as a telephone system is less useful without a phone book.” Indeed, “[t]here is little difference between DNS support offered by a broadband Internet access provider and the 411 directory service offered by many providers of telephone service. Both allow a user to discover how to reach another party, but no one argued that telephone companies were not providing a telecommunications service because they offered 411.” Second, the factual assumption that DNS lookup necessarily is provided *by the broadband Internet access provider* is no longer true today, if it ever was. While most users rely on

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<sup>1033</sup> Consider also the role that telephone operators traditionally played in routing telephone calls. Traditional telephony required a telephone operator to route and place calls requested by the customer. We do not believe that anyone would argue that such arrangements would turn traditional telephone service into an information service.

their broadband providers to provide DNS lookup, the record indicates that third-party-provided-DNS is now widely available, and the availability of the service from third parties cuts against a finding that Internet transmission and DNS are inextricably intertwined[.]

371. Accordingly, we now reconsider our prior analysis and conclude for two reasons that the bundling of DNS by a provider of broadband Internet access service does not convert the broadband Internet access service offering into an integrated information service. This is both because DNS falls within the telecommunications systems management exception to the definition of information service and because, regardless of its classification, it does not affect the fundamental nature of broadband Internet access service as a distinct offering of telecommunications.

372. *Caching Falls Within the Telecommunications Systems Management Exception.* Opponents of revisiting the Commission’s earlier classification decisions also point to caching as another feature of broadband Internet access service packages that the Commission relied upon to find such packages to be information services. When offered as part of a broadband Internet access service, caching, like DNS, is simply used to facilitate the transmission of information so that users can access other services, in this case by enabling the user to obtain “more rapid retrieval of information” through the network. Thus, it falls easily within the telecommunications systems management exception to the information service definition. We observe that this caching function provided by broadband providers as part of a broadband Internet service, is distinct from third party caching services provided by parties other than the provider of Internet access service (including content delivery networks, such as Akamai), which are separate information services.

#### NOTES & QUESTIONS

1. *Now Chevron step two is on the other foot.* How does the FCC leverage the Supreme Court’s decision in *Brand X* to its advantage in this order? Recall when open access advocates argued in *Brand X* that the text of the Communications Act was unambiguous. Does the FCC agree? If not, why?

2. *How to deal with a regulatory flip-flop.* What justifications does the agency provide for reversing its prior classification decisions? Can you articulate precisely what changed and why that is relevant to the Title II classification? Was the change based on new facts, new values, politics, or some combination of the

three? Imagine you are the FCC defending this decision before the Supreme Court. What would highlight as the lead argument in support of the order?

a. *What matters is indispensable.* What does the FCC identify as the “indispensable function” of broadband Internet access service? What are the three types of evidence that the agency uses to support this conclusion?

b. *Protecting “edge service” providers.* What is an example of an “edge service” and how does the FCC classify those services? Does it matter that some edge providers negotiate individual deals with broadband providers? What happens when a broadband provider also provides edge services?

c. *An “offering” to the mass market.* The definition of a “telecommunications service” is the “offering of telecommunications for a fee directly to the public.”\* How does the FCC interpret the term “directly to the public”? What if a company offers different prices and options in different cities? Does the size of the market matter?

3. *All about the deference.* Does the FCC have the power to change the classification of broadband Internet services? What standard should a court apply when reviewing the agency’s decision? Do you think that any special burden should apply when an agency reverses course in this way? Does it help that the FCC reads the D.C. Circuit decision as an “implicit invitation” to reclassify?

4. *Finding a new analogy.* You have already seen the warring analogies in *Brand X*—is cable modem service more like a car, a leashed puppy, or pizza delivery? What analogy does the FCC focus on in this order? How did the FCC classify services like DNS and Caching? How does the evolution of the Internet ecosystem support the agency’s analysis?

5. *Where the rubber hits the road.* The FCC’s definition of “broadband Internet access service” is a “mass market retail service by wire or radio that provides the capability to transmit data to and receive data from all or substantially all Internet endpoints” including services provided “over any technology platform” and any “functional equivalent.”† That sounds pretty comprehensive. But can you imagine a future scenario where the FCC might grapple with the question of what qualifies as a functional equivalent to broadband service?

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\* 47 U.S.C. § 153(53).

† 30 FCC Rcd. 5745–46 (internal footnotes omitted).

6. *Embracing regulatory opt-out.* While a Title II classification would traditionally have triggered hundreds of additional regulatory obligations, the FCC made a point of embracing a “light touch” approach by using forbearance to limit the rules for broadband providers. Why do you think the agency chose to emphasize the use of forbearance? How does forbearance of these Title II regulations serve the agency’s broader purposes of promoting broadband access?

a. *Should it stay or should it go?* Can you identify some of the most significant Title II obligations that the FCC has withheld through forbearance?

b. *New rules on the way.* While the FCC has promised to withhold many of the traditional Title II regulations, the agency left a few obligations in place. Significantly, the agency emphasized that it will enforce Section 222 obligations concerning privacy protections for broadband consumers. Under the rules, providers must “take reasonable precautions to protect the confidentiality of its customers’ proprietary information.”\* However, the FCC stated that it will not impose privacy rules on broadband providers until the agency completes a separate rulemaking on that topic.† This is likely to become a major regulatory priority for the agency, given the volume of customer data collected by broadband providers and the persistent threats to that data.

**p.679, replace opening paragraph of subsection 3 with the following:**

Prior to the reclassification of broadband Internet access services under Title II, the FCC spent more than five years litigating over the regulation of Internet services classified under the “information service” category. Before that, the agency fought for nearly a decade to classify the Internet as an information service because it was something new that did not fall into any of the families of services the FCC already regulated. Given that the Internet clearly involves communications via wire or radio, it falls comfortably within the Title I catch-all category. The question raised in the prior court battles over the open access rules was what regulations does the FCC have authority to impose under Title I?

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\* 47 U.S.C. § 222(a).

† 30 FCC Rcd. 5820.

**p.691, insert after Note 5:**

6. *The 700 MHz C Block.* AT&T tried to make a big deal about the C Block licenses, which had attached to them some “openness” requirements. It was arguing that by negative implication, all other licenses lacked these requirements. AT&T also argued that because of the strings attached, Verizon was permitted to win the auction at a cheaper price. Well, recently, Verizon ended up paying a little bit more. Verizon uses the C Block to provide 4G LTE services that provide mobile data. It tried to suppress Internet “tethering” apps, which allows the phone’s Internet access to be used by a linked laptop. But the C Block rules specifically require customers to be able to use whatever devices and apps they choose. For violating the openness requirements, Verizon was fined \$1.25 million.\*

**NOTE: VERIZON V. FCC**

Above, we read the FCC’s case for ancillary jurisdiction when it promulgated the Open Internet rules in 2010. As mentioned in the prior chapter, the Open Internet rules were immediately challenged in federal court. The case was randomly assigned to the DC circuit Court of Appeals, which issued its opinion on January 14, 2014.†

*Ancillary jurisdiction exists.* The ancillary jurisdiction analysis proceeded in the standard two steps. Step 1 was easily satisfied because the Internet is clearly interstate communications by wire or radio. As usual, Step 2 was the challenge. Most of the D.C. Circuit’s analysis focused on 47 U.S.C. § 706. Recall that Section 706(a) tells the FCC that it “shall encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans” via particular means. Subsection (b) tells the FCC that if it makes a finding that broadband is not being rolled out in a timely fashion, “it shall take immediate action to accelerate deployment.”

\* Press Release, FCC, *Verizon Wireless To Pay \$1.25 Million To Settle Investigation* (July 31, 2012) (available at <http://www.fcc.gov/document/verizon-wireless-pay-125-million-settle-investigation>).

† *Verizon v. F.C.C.*, 740 F.3d 623 (D.C. Cir. 2014).

Back in the 2008 *Comcast* adjudication litigation, the FCC tried to claim § 706 as a source of statutory power. But the court held that a prior FCC reading of § 706 precluded this interpretation. On remand when issuing the Open Internet rules, the FCC expressly rejected that prior reading and changed its mind.\* And agencies are allowed to change their views, as long as they explain transparently why they have done so.

Accordingly, in *Verizon v. FCC*, the court reviewed the FCC’s *new* interpretation of § 706—as a substantive grant of power from Congress to the FCC. The court granted *Chevron* deference,† which the Supreme Court recently clarified is appropriate even as to jurisdictional questions.‡ Applying *Chevron*, the court concluded that the FCC’s reading of both §§ 706(a) and (b) as grants of regulatory authority was a permissible construction of ambiguous text. In other words, § 706 could reasonably be interpreted as not merely a “policy statement” or rhetorical verbiage. Instead, it granted substantive power to the FCC.§

Having determined that § 706 was a grant of substantive power to the FCC, the court next had to examine whether the Open Internet rules were sufficiently connected to that grant of power to be considered “ancillary.” In deciding this question, the court necessarily had to make both legal and policy judgments. As a legal matter, the court concluded that—assuming that the FCC’s predictions about the lack of net neutrality were correct—the Open Internet rules were sufficiently connected to the goals outlined in § 706.\*\*

As a policy or empirical matter, the court also concluded that the FCC had provided sufficiently good reasons to justify its empirical predictions about

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\* *See id.* at 637 (noting that “the Commission expressly declared: ‘To the extent that the Advanced Services Order can be construed as having read Section 706(a) differently, we reject that reading of the statute for the reasons discussed in the text.’ Open Internet Order, 25 F.C.C.R. at 17969 ¶ 119 n.370”).

† *Chevron, U.S.A., Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837 (1984).

‡ *See Verizon*, 740 F.3d at 635 (acknowledging the holding of *City of Arlington v. FCC*, 133 S. Ct. 1863, 1874 (2013)).

§ *See id.* at 637.

\*\* *See id.* at 643.

what would happen without the Open Internet rules. This latter point is important because it answered Verizon's Administrative Procedure Act (APA) argument that the rules were "arbitrary and capricious."<sup>\*</sup> In other words, the court—while settling the jurisdictional question—also held that the FCC's rules survived an APA challenge.<sup>†</sup>

To recap, for the first time, a federal court of appeals concluded that the FCC has the ancillary jurisdiction, under Title I, and § 706, to promulgate net neutrality rules. In reaching this jurisdictional conclusion, the court also held that the Open Internet rules were not "arbitrary and capricious" (under the Administrative Procedure Act).

*But unlawful common carriage obligations.* Although the jurisdictional holding favored the FCC, the court nevertheless ruled in favor of Verizon on the merits. It did so on the basis of various statutory provisions in the Communications Act that forbid treating certain actors as common carriers (to the extent that they are not providing common carriage). Two provisions are critical.

Most important, 47 U.S.C. § 153(51) states: "The term 'telecommunications carrier' means any provider of telecommunications services . . . . 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 . . ." (emphasis added). Firms like Verizon are telecommunications carriers because they do provide Title II telephony services, e.g. traditional landline telephone. But § 153(51) explicitly states that such firms should be treated as common carriers "only to the extent that" they are actually providing telecommunications services.

The other relevant provision is 47 U.S.C. § 332(c)(2), which states: "A person engaged in the provision of a service that is a *private* mobile service shall not, insofar as such person is so engaged, be treated as a common carrier for any purpose under this [Act]" (emphasis added). Mobile telephony

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<sup>\*</sup> 5 U.S.C. § 706(2)(A).

<sup>†</sup> See *Verizon*, 740 F.3d at 649.

is categorized as “commercial mobile [radio] services,”\* and the term “private mobile service” is meant to distinguish standard mobile telephony (common carriage) from what is called private carriage.

The FCC classified mobile Internet access as private mobile service,<sup>†</sup> which means that under § 332(c)(2), it should not be considered common carriage. Moreover, all Internet access counts as an information service, not a telecommunications service. This is why the D.C. Circuit Court of Appeals wrote that “[M]obile-data providers are statutorily immune, *perhaps twice over*, from treatment as common carriers.”<sup>‡</sup>

Given these statutory sections, if the Open Internet rules effectively treats a telecommunications carrier as a common carrier while it is providing information service, §153(51), or a private mobile service provider as a common carrier while it is providing an information service, §332(c)(2), then the rules violate specific commands of Congress. This is precisely what the court held.

After going through a vague and complex history of common carriage,<sup>§</sup> the court ultimately held that the Open Internet antidiscrimination and no blocking rules are equivalent to common carrier obligations. In particular, the court pointed out that the FCC never argued that the antidiscrimination provision in the Open Internet rules somehow differed from the nondiscrimination standard applied to common carriers generally. The court also contrasted the Open Internet rules to mobile “data roaming” requirements,

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\* 47 U.S.C. § 332(d)(1) defines commercial mobile service as: “any mobile service . . . that is provided for profit and makes interconnected service available (A) to the public or (B) to such classes of eligible users as to be effectively available to a substantial portion of the public.”

<sup>†</sup> See *Wireless Broadband Order*, 22 F.C.C.R. ¶ 37.

<sup>‡</sup> *Verizon*, 740 F.3d at 650 (quoting *Cellco Partnership v. FCC*, 700 F.3d 534 (DC Cir. 2012) (emphasis added)).

<sup>§</sup> See, e.g., *id.* at 652 (noting that common carriage does not have to be all or nothing and instead can fall into a “gray area”) (quoting *Cellco Partnership v. FCC*, 700 F.3d 534, 541 (D.C. Cir. 2012)).

which were sufficiently flexible (requiring consideration of 16 factors to determine whether a roaming agreement is commercially reasonable) so as not to count as common carriage.\*

In sum, according to the D.C. Circuit Court of Appeals, the Open Internet rules amount to common carriage regulation, which is not statutorily permitted under § 153(51) and § 332(c)(2). What’s noteworthy about this analysis is that little *Chevron* deference was granted even though the court explicitly acknowledged that the doctrine applied to the Commission’s reading of the term “common carrier.”†

Try, try, again. On remand, the FCC has launched yet another NPRM to revise its Open Internet rules.‡ While various approaches and ideas were floated, the specific proposed regulations would do the following. First, they would enhance the transparency rule by requiring more useful disclosures. Second, the FCC would maintain the “no blocking” rule—including the identical text of the original regulation that the court had struck down—with the further clarification that this rule “does not preclude broadband providers from negotiating individualized, differentiated arrangements with similarly situated as providers . . . [s]o long as broadband providers do not degrade lawful content or service to below a minimum level of access . . . .”§ Third, instead of an antidiscrimination rule, the commission would adopt a rule requiring broadband providers always to use “commercially reasonable” practices, judged case-by-case under the totality of the circumstances.\*\* It’s impossible to know what regulations will finally see the light of day, and no doubt, multiple petitions of review will be immediately filed.

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\* *See id.* at 657.

† *Id.* at 650.

‡ *See In the Matter of Protecting & Promoting the Open Internet*, GN 14-280, 2014 WL 3384940 (F.C.C. July 10, 2014).

§ *Id.* at ¶ 89.

\*\* *See id.* at ¶ 116.

**p.709, add after last sentence of Note 8 (and replace existing Note 9):**

. . . Also, some states are legislating on this front. California recently enacted a law that prohibits its PUC from regulating VoIP until Jan. 2020.\*

9. *Domesticating VoIP?* We may not know definitively what VoIP is. That said, the FCC has incrementally applied certain obligations associated with common carriers. To summarize:

- May 2005: 911 emergency calling requirements (issued under Title I and § 251(e));<sup>†</sup>
- June 2006: USF contributions (issued under Title I and § 254(d));<sup>‡</sup>
- March 2007: Customer Proprietary Network Information (privacy) obligations (issued under Title I);<sup>§</sup>
- June 2007: disability access requirements under 47 U.S.C. §255 (issued under Title I);<sup>\*\*</sup>
- November 2007: portability of local phone numbers to and from VoIP providers (issued under § 251(e) authority regarding FCC jurisdiction over North American Numbering Plan);<sup>††</sup>
- May 2009: mandatory notice from VoIP providers before disconnection (issued under Title I);<sup>‡‡</sup>

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\* See Act of September 28, 2012, ch. 733, 2012 Cal. Legis. Serv. 6011 (West) (codified at Cal. Pub. Util. § 239).

† See VoIP 911 Order, 20 FCC Rcd at 10246, ¶ 1.

‡ See Universal Service Contribution Methodology, Report and Order and Notice of Proposed Rulemaking, 21 FCC Rcd 7518, 7538-43, ¶¶ 38-49 (rel. June 27, 2006), aff'd in relevant part, Vonage Holdings Corp., v. FCC, 2007 WL 1574611 (D.C. Cir. June 1, 2007).

§ See Implementation of the Telecommunications Act of 1996, Report and Order and Further Notice of Proposed Rulemaking, FCC 07-22 (rel. April 2, 2007) (CPNI Order).

\*\* See Implementation of Sections 255 and 251(a)(2) of The Communications Act of 1934, Report and Order, FCC 07-110 (rel. June 15, 2007).

†† See *In the Matter of Tel. No. Requirements for IP-Enabled Servs. Providers Local No. Portability*, 22 FCC Rcd. 19531, 19548-49, ¶ 32 (2007).

‡‡ See *In the Matter of IP-Enabled Servs.*, 24 FCC Rcd. 6039, 6039-40 ¶ 2 (2009).

- Feb. 2012: reporting of network outages (issued under various sections, including Title I).\*

**p.719, insert at bottom of page:**

5. *Shifting categories.* Recently, there's been some settling on the vocabulary used to describe various video services, including IPTV. In 2012, the FCC started to chunk the entire market for delivered video programming into three strategic groups.

First, there are the venerable *broadcast TV stations*. You might be surprised that this type of video is even counted given that it's "free" TV that is advertiser supported. But with the rise of retransmission consent fees, broadcast TV stations are now getting "paid" in ways that resemble the business model of cable programming networks.

Second, there are MVPDs (Multichannel Video Programming Distributors), a term we've seen many times before.<sup>†</sup> This term is broad and includes all entities that sell subscriptions to multiple channels of video programming. It specifically includes cable operators (about 60% of the market), DBS operators (33%), and the video services offered by recent entrants Verizon and AT&T through their FiOS and U-Verse video products ("telephone MVPDs") (7%).<sup>‡</sup>

Third, the FCC has introduced a new term, "Online Video Distributors" (OVDs), which describes services such as Netflix, Hulu, and YouTube. "An 'OVD' is any entity that offers video content by means of the Internet or other Internet Protocol (IP)-based transmission path provided by a person or entity

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\* See *The Proposed Extension of Part 4 of the Commission's Rules Regarding Outage Reporting To Interconnected Voice Over Internet Protocol Service Providers and Broadband Internet Service Providers*, Report and Order, 27 FCC Rcd 2650, 2651, ¶ 1 (2012).

<sup>†</sup> See 47 U.S.C. § 522(13) ("a person such as, but not limited to, a cable operator, a multichannel multipoint distribution service, a direct broadcast satellite service, or a television receive-only satellite program distributor, who makes available for purchase, by subscribers or customers, multiple channels of video programming.").

<sup>‡</sup> The market percentages come from the FCC's 14<sup>th</sup> Video Competition report. *In the Matter of Annual Assessment of the Status of Competition in the Mkt. for the Delivery of Video Programming*, 27 F.C.C.R. 8610, 8611, ¶¶ 3-5 (2012).

other than the OVD.”\* Roughly speaking, OVDs provide the content, but you the customer must BYOB (bring your own broadband).

6. *Is an MVPD an OVD?* MVPDs have launched various “TV Everywhere” initiatives, to make their video content available on laptops, tablets, and phones, delivered over the public Internet. Some MVPDs provide this service only to subscribers of their traditional services, whereas other MVPDs are allowing even non-subscribers of their traditional services to purchase at least limited access. According to the FCC, “[a]n OVD does not include an MVPD inside its MVPD footprint or an MVPD to the extent it is offering Online Video Programming as a component of an MVPD subscription to customers whose homes are inside its MVPD footprint.”† In other words, as long as the MVPD is operating within its footprint, the delivered video remains within the service category of MVPD even if it’s being offered over the Internet, over facilities that are not owned by the MVPD.

7. *Is an OVD an MVPD?* For various reason, it seems clear that an OVD is *not* a cable operator. By tracing the definition of a “cable operator,” can you explain why? The harder question is whether an OVD counts as an MVPD. If so, then an OVD would be subject to various regulations. On the one hand, some regulations would be beneficial. For example, the OVD would then be able to insist on “program access” rights‡ as well as good faith negotiations in garnering retransmission consent rights from broadcast stations.§ What might Netflix do with such rights? On the other hand, some regulations would exact costs. For example, the OVD would be subject to “program carriage” claims,\*\*

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\* *Application of Comcast Corporation, General Electric Company and NBC Universal, Inc. for Consent to Assign Licenses and Transfer Control of Licenses*, Memorandum Opinion and Order, 26 FCC Rcd 4238, 4358, App. A (2011) (“Comcast-NBCU Order”) (defining “OVD”).

† *Id.*

‡ See 47 U.S.C. § 548 (limiting cable operators who own video content from preventing other MVPD reasonable access to that content).

§ See 47 U.S.C. §§ 325(b)(3)(C)(ii)-(iii); 47 C.F.R. § 76.65.

\*\* See 47 U.S.C. § 536.

which could be asserted by unaffiliated video programming vendors. This difficult question of whether an OVD is an MVPD has been raised in pending program access complaints.\*

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\* See, e.g., VDC Corp. v. Turner Network Sales, Inc., et al., Program Access Complaint (Jan. 18, 2007); Sky Angel U.S., LLC v. Discovery Communications LLC, et al., Program Access Complaint, MB Docket No. 12-80, CSR-8605-P (Mar. 24, 2010). The FCC is currently seeking comment on the interpretation of the terms “MVPD” and “channel.” See *Media Bureau Seeks Comment On Interpretation of the Terms “Multichannel Video Programming Distributor” and “Channel” as Raised in Pending Program Access Complaint Proceeding*, MB Docket No. 12-83, Public Notice, 27 FCC Rcd. 3079 (2012).