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47 CFR Parts 1, 8, and 20 Protecting and Promoting the Open Internet; Final Rule

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Parts 1, 8, and 20

[GN Docket No. 14-28, FCC 15-24]

Protecting and Promoting the Open Internet

AGENCY: Federal Communications Commission.

ACTION: Final rule.

SUMMARY: In this document, the Federal **Communications Commission** (Commission) establishes rules to protect and promote the open Internet. Specifically, the Open Internet Order adopts bright-line rules that prohibit blocking, throttling, and paid prioritization; a rule preventing broadband providers from unreasonably interfering or disadvantaging consumers or edge providers from reaching one another on the Internet; and provides for enhanced transparency into network management practices, network performance, and commercial terms of broadband Internet access service. These rules apply to both fixed and mobile broadband Internet access services. The Order reclassifies broadband Internet access service as a telecommunications service subject to Title II of the Communications Act. Finally, the Order forbears from the majority of Title II provisions, leaving in place a framework that will support regulatory action while simultaneously encouraging broadband investment, innovation, and deployment. **DATES:** This rule is effective June 12.

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The modified information collection requirements in paragraphs 164, 166, 167, 169, 173, 174, 179, 180, and 181 of this document are not applicable until approved by the Office of Management and Budget (OMB). The Federal Communications Commission will publish a separate document in the **Federal Register** announcing such approval and the relevant effective date(s).

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SUPPLEMENTARY INFORMATION: This is a summary of the Commission's Report and Order on Remand, Declaratory Ruling, and Order ("*Open Internet Order*" or "*Order*") in GN Docket No. 14–28, adopted on February 26, 2015 and released on March 12, 2015. The full text of this document can be viewed at the following Internet address:

https://apps.fcc.gov/edocs_public/ attachmatch/FCC-15-24A1.docx. The full text of this document is also available for public inspection during regular business hours in the FCC Reference Center, 445 12th Street SW., Room CY-A257, Washington, DC 20554. To request materials in accessible formats for people with disabilities (e.g. braille, large print, electronic files, audio format, etc.) or to request reasonable accommodations (e.g. accessible format documents, sign language interpreters, CART, etc.), send an email to fcc504@fcc.gov or call the **Consumer & Governmental Affairs** Bureau at (202) 418-0530 (voice) or (202) 418-0432 (TTY).

Synopsis

In the Report and Order on Remand, Declaratory Ruling, and Order, we establish rules to protect and promote the open Internet, reclassify broadband Internet access service as a telecommunications service subject to Title II of the Communications Act, and forbear from the majority of Title II provisions.

I. Introduction

1. The open Internet drives the American economy and serves, every day, as a critical tool for America's citizens to conduct commerce, communicate, educate, entertain, and engage in the world around them. The benefits of an open Internet are undisputed. But it must remain open: Open for commerce, innovation, and speech; open for consumers and for the innovation created by applications developers and content companies; and open for expansion and investment by America's broadband providers. For over a decade, the Commission has been committed to protecting and promoting an open Internet.

2. Four years ago, the Commission adopted open Internet rules to protect and promote the "virtuous cycle" that drives innovation and investment on the Internet-both at the "edges" of the network, as well as in the network itself. In the years that those rules were in place, significant investment and groundbreaking innovation continued to define the broadband marketplace. For example, according to US Telecom, broadband providers invested \$212 billion in the three years following adoption of the rules-from 2011 to 2013—more than in any three year period since 2002.

3. Likewise, innovation at the edge moves forward unabated. For example, 2010 was the first year that the majority of Netflix customers received their video content via online streaming

rather than via DVDs in red envelopes. Today, Netflix sends the most peak downstream traffic in North America of any company. Other innovative service providers have experienced extraordinary growth-Etsy reports that it has grown from \$314 million in merchandise sales in 2010 to \$1.35 billion in merchandise sales in 2013. And, just as importantly, new kinds of innovative businesses are busy being born. In the video space alone, in just the last sixth months, CBS and HBO have announced new plans for streaming their content free of cable subscriptions; DISH has launched a new package of channels that includes ESPN, and Sony is not far behind; and Discovery Communications founder John Hendricks has announced a new over-the-top service providing bandwidth-intensive programming. This year, Amazon took home two Golden Globes for its new series ''Transparent.''

4. The lesson of this period, and the overwhelming consensus on the record, is that carefully-tailored rules to protect Internet openness will allow investment and innovation to continue to flourish. Consistent with that experience and the record built in this proceeding, today we adopt carefully-tailored rules that would prevent specific practices we know are harmful to Internet openness—blocking, throttling, and paid prioritization—as well as a strong standard of conduct designed to prevent the deployment of new practices that would harm Internet openness. We also enhance our transparency rule to ensure that consumers are fully informed as to whether the services they purchase are delivering what they expect.

5. Carefully-tailored rules need a strong legal foundation to survive and thrive. Today, we provide that foundation by grounding our open Internet rules in multiple sources of legal authority—including both section 706 of the Telecommunications Act and Title II of the Communications Act. Moreover, we concurrently exercise the Commission's forbearance authority to forbear from application of 27 provisions of Title II of the Communications Act, and over 700 Commission rules and regulations. This is a Title II tailored for the 21st century, and consistent with the "light-touch" regulatory framework that has facilitated the tremendous investment and innovation on the Internet. We expressly eschew the future use of prescriptive, industry-wide rate regulation. Under this approach, consumers can continue to enjoy unfettered access to the Internet over their fixed and mobile broadband connections, innovators can continue to

enjoy the benefits of a platform that affords them unprecedented access to hundreds of millions of consumers across the country and around the world, and network operators can continue to reap the benefits of their investments.

6. Informed by the views of nearly 4 million commenters, our staff-led roundtables, numerous *ex parte* presentations, meetings with individual Commissioners and staff, and more, our decision today—once and for all—puts into place strong, sustainable rules, grounded in multiple sources of our legal authority, to ensure that Americans reap the economic, social, and civic benefits of an open Internet today and into the future.

II. Executive Summary

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. 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. The Verizon court further affirmed the 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.'

8. Threats to Internet openness remain today. The record reflects that broadband providers hold all the tools necessary to deceive consumers, degrade content, or disfavor the content that they don't like. The 2010 rules helped to deter such conduct while they were in effect. But, as 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. Indeed, the wireless industry had a wellestablished 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. We welcome this tremendous investment and innovation in the mobile marketplace. With carefullytailored rules in place, that investment can continue to flourish and consumers can continue to enjoy unfettered access to the Internet over their mobile broadband connections. Indeed, 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 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 noblocking rule and a requirement that broadband providers engage in "commercially reasonable" practices. The Commission also asked about whether it should adopt other brightline rules or different standards using other sources of Commission authority, including Title II. And if Title II were to apply, the Commission asked about how it should exercise its authority to forbear from Title II obligations. It asked whether mobile services should also be classified under Title II.

11. Three overarching objectives have guided us in answering these questions, 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. (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.)

12. In enacting the Administrative Procedure Act (APA), Congress instructed expert agencies conducting rulemaking proceedings to "give interested persons an opportunity to participate in the rule making through submission of written data, views, or arguments." It is public comment that cements an agency's expertise. As was explained in the seminal report that led to the enactment of the APA:

The reason for [an administrative agency's] existence is that it is expected to bring to its task greater familiarity with the subject than legislators, dealing with many subjects, can have. But its knowledge is rarely complete, and it must always learn the frequently clashing viewpoints of those whom its regulations will affect.

13. Congress could not have imagined when it enacted the APA almost seventy years ago that the day would come when nearly 4 million Americans would exercise their right to comment on a proposed rulemaking. But that is what has happened in this proceeding and it is a good thing. The Commission has listened and it has learned. Its expertise has been strengthened. Public input has "improve[d] the quality of agency rulemaking by ensuring that agency regulations will be 'tested by exposure to diverse public comment.'" There is general consensus in the record on the need for the Commission to provide certainty with clear, enforceable rules. There is also general consensus on the need to have such rules. Today the Commission, informed by all of those views, makes a decision grounded in the record. The Commission has considered

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the arguments, data, and input provided by the commenters, even if not in agreement with the particulars of this Order; that public input has created a robust record, enabling the Commission to adopt new rules that are clear and sustainable.

A. Strong Rules That Protect Consumers From Past and Future Tactics That Threaten the Open Internet

1. Clear, Bright-Line Rules

14. Because the record overwhelmingly supports adopting rules and demonstrates that three specific practices invariably harm the open Internet—Blocking, Throttling, and Paid Prioritization—this Order bans each of them, applying the same rules to both fixed and mobile broadband Internet access service.

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 *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 nonharmful 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. (To be clear, the protections of the no-blocking and nothrottling rules apply to particular classes of applications, content and services as well as particular applications, content, and services.) 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 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. (Unlike the no-blocking and nothrottling 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.)

19. The record demonstrates the need for strong action. The Verizon court itself noted that broadband networks have "powerful incentives to accept fees from edge providers, either in return for excluding their competitors or for granting them prioritized access to end users." Mozilla, among many such commenters, explained that $``[p]\ensuremath{\mathsf{rient}}\xspace^{\ensuremath{\mathsf{rie}}\xspace}\xspace^{\ensuremath{\mathsfrie}\xspace}\xspace^{\ensuremath{\mathsfrie}\xspace}\xspace^{\ensuremath{\mathsfrie}\xspace}\xspace^{\ensuremath{\mathsfrie}\xspace}\xspace^{\ensuremath{\mathsfrie}\xspace}\xspace^{\ensuremath{\mathsfrie}\xspace}\xspace^{\ensuremath{\mathsfrie}\xspace}\xspace^{\ensure$ 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. The key insight of the virtuous cycle is that broadband providers have both the incentive and the ability to act as gatekeepers standing between edge providers and consumers. As gatekeepers, they can block access altogether; they can target competitors, including competitors to their own video services; and they can extract unfair tolls. Such conduct would, as the Commission concluded in 2010, "reduce the rate of innovation at the edge and, in turn, the likely rate of improvements to network infrastructure." In other words, when 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.

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." 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:

A person engaged in the provision of broadband Internet access service shall publicly disclose accurate information regarding the network management practices, performance, and commercial terms of its broadband Internet access services sufficient for consumers to make informed choices regarding use of such services and for content, application, service, and device providers to develop, market, and maintain Internet offerings.

24. Today's Order reaffirms the importance of ensuring transparency, so that consumers are fully informed about

the Internet access they are purchasing and so that edge providers have the information they need to understand whether their services will work as advertised. To do that, the Order builds on the strong foundation established in 2010 and enhances the transparency rule for both end users and edge providers, including by adopting a requirement that broadband providers always must disclose promotional rates, all fees and/or surcharges, and all data caps or data allowances; adding packet loss as a measure of network performance that must be disclosed; and requiring specific notification to consumers that a "network practice" is likely to significantly affect their use of the service. Out of an abundance of caution and in response to a request by the American Cable Association, we also adopt a temporary exemption from these enhancements for small providers (defined for the purposes of the temporary exception as providers with 100,000 or fewer subscribers), and we direct our Consumer & Governmental Affairs Bureau to adopt an Order by December 15, 2015 concerning whether to make the exception permanent and, if so, the appropriate definition of "small." Lastly, we create for all providers a "safe harbor" process for the format and nature of the required disclosure to consumers, which we believe will result in more effective presentation of consumer-focused information by broadband providers.

4. Scope of the Rules

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 consumerfacing service that broadband networks provide, which is known as "broadband Internet access service'' (BIAS) (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)) and is defined to be:

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 dialup 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.

28. Interconnection. BIAS involves 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.

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: An appropriate vehicle for enforcement where disputes are primarily over commercial terms and that involve some very large corporations, including companies like transit providers and

Content Delivery Networks (CDNs), that act on behalf of smaller edge providers.

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 arrangementsplacing 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 lastmile 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 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 term "specialized services" can be confusing because the critical point is not whether the services are "specialized;" it is that they are not broadband Internet access service. IP-services that do not travel over broadband Internet access service, like the facilities-based VoIP services used by many cable customers, are not within the scope of the open Internet rules, which protect access or use of broadband Internet access service. Nonetheless, these other non-broadband Internet access service data services could be provided in a manner that undermines the purpose of the open Internet rules and that will not be permitted. 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. The Commission will vigilantly watch for such abuse, and its actions will be aided by the existing transparency requirement that non-broadband Internet access service data services be disclosed.

5. Enforcement

36. The Commission may enforce the open Internet rules through investigation and the processing of complaints (both formal and informal). In addition, the Commission may provide guidance through the use of enforcement advisories and advisory opinions, and it will appoint an ombudsperson. In order to provide the Commission with additional understanding, particularly of technical issues, the Order delegates to the Enforcement Bureau the authority to request a written opinion from an outside technical organization or otherwise to obtain objective advice from industry standard-setting bodies or similar organizations.

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 21st Century. Unlike the application of Title II to incumbent wireline companies in the 20th 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 authorityincluding 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 socalled "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. Moreover, a number of parties who, in this proceeding, now oppose our reclassification of broadband Internet access service, previously argued that cable broadband should be deemed a telecommunications service. 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 pizzadelivery 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)." 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.

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), (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.) 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 deployment. 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. We take this mandate seriously. For example, the Commission recently took enforcement action under section 222 (and section 201(b)) against two telecommunications companies that stored customers' personal information, including social security numbers, on unprotected, unencrypted Internet servers publicly accessible using a basic Internet search. This unacceptably exposed these consumers to the risk of identity theft and other harms.

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.

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. All Americans, including those with disabilities, must be able to reap the benefits of an open Internet, and ensuring access for these individuals will further the virtuous cycle of consumer demand, innovation, and deployment. This Order thus concludes that application of sections 225, 255, and 251(a)(2) is necessary to protect consumers and furthers the public interest, as explained in greater detail below.

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). Section 224 of the Act governs the Commission's regulation of pole attachments. In particular, section 224(f)(1) requires utilities to provide cable system operators and telecommunications carriers the right of "nondiscriminatory access to any pole, duct, conduit, or right-of-way owned or controlled" by a utility. 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 lowincome Americans-furthering our goals of more and better broadband. With the exception of section 254(d), (g), and (k) as discussed below, we therefore do not find the statutory test for forbearance from section 254 (and the related provision in section 214(e)) is met. We recognize that supporting broadbandcapable networks is already a key component of Commission's current universal service policies. The Order concludes, however, that directly applying section 254 provides both more legal certainty for the Commission's prior decisions to offer universal service subsidies for deployment of broadband networks and adoption of broadband services 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.

59. Below, we first adopt three brightline rules banning blocking, throttling, and paid prioritization, and make clear the no-unreasonable interference/ disadvantage standard by which the Commission will evaluate other practices, according to their facts. These rules are grounded in multiple sources of statutory authority, including section 706 and Titles II and III of the Communications Act. Second, based on a current factual record, we reclassify broadband Internet access service as a telecommunications service under Title II. And, third, guided by our goals of more, better, and open broadband, we exercise our forbearance authority to put in place a "light touch" Title II regulatory framework that protects consumers and innovators, without deterring investment.

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, 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.

62. *Carterfone* and subsequent regulatory actions by the Commission severed the market for customer premises equipment (CPE) from that for telephone service. In doing so, the Commission allowed new participants and new ideas into the market, setting the stage for a wave of 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. As former Chairman Michael Powell noted in 2004, "ensuring that consumers can obtain and use the content, applications and devices they want . . . is critical to unlocking the vast potential of the broadband Internet." 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.

66. In June 2010, following a D.C. Circuit decision invalidating the Commission's exercise of ancillary authority to provide consumers basic

protections in using broadband Internet services, the Commission initiated a *Notice of Inquiry* to "seek comment on our legal framework for broadband Internet service." The Notice of Inquiry recognized that "the current legal classification of broadband Internet service is based on a record that was gathered a decade ago." It sought comment on three separate alternative legal frameworks for classifying and regulating broadband Internet service: (1) As an information service, (2) as a telecommunications service "to which all the requirements of Title II of the Communications Act would apply," and (3) solely as to the "Internet connectivity service," as a telecommunications service with forbearance from most Title II obligations. The Notice of Inquiry sought comment on both wired and wireless broadband Internet services, "as well as on other factual and legal issues specific to . . . wireless services that bear on their appropriate classification.'

67. In December 2010, the Commission adopted the Open Internet Order (76 FR 59192-01, Sept. 23, 2011), 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. In order to maintain flexibility, the Commission tailored the rules contained in the Open Internet Order to fit the technical and economic realities of the broadband ecosystem. To this end, the 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 Web sites" 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 and the basic rationale supporting the *Open Internet Order*, the court struck down the noblocking and antidiscrimination rules as at odds with section 3(51) of the Communications Act, holding that it prohibits the Commission from exercising its section 706 authority to impose common carrier regulation on a service not classified as a

"telecommunications service," and section 332(c)(2), which prohibits common carrier treatment of "private mobile services." The 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.

73. The Commission took many steps to facilitate public engagement in response to the 2014 Open Internet NPRM—including the establishment of a dedicated email address to receive comments, a mechanism for submitting large numbers of comments in bulk via a Comma Separated Values (CSV) file, and the release of the entire record of comments and reply comments as Open Data in a machine-readable format, so that researchers, journalists, and other parties could analyze and create visualizations of the record. In addition, Commission staff hosted a series of roundtables covering a variety of topics related to the open Internet proceeding, including events focused on different policy approaches to protecting the open Internet, mobile broadband, enforcement issues, technology, broadband economics, and the legal issues surrounding the Commission's proposals.

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. Quantitative analysis of the comment pool reveals a number of key insights. For example, by some estimates, nearly half of all comments received by the Commission were unique. While there has been some public dispute as to the percentage of comments taking one position or another, it is clear that the majority of comments support Commission action to protect the open Internet. Comments regarding the continuing need for open Internet rules, their legal basis, and their substance formed the core of the overall body of comments. In particular, support for the reclassification of broadband Internet access under Title II, opposition to fast lanes and paid prioritization, and unease regarding the market power of broadband Internet access service providers were themes frequently addressed by commenters. In offering this summary, we do not mean

to overlook the diversity of views reflected in the impressively large record in this proceeding. Most of all, we are grateful to the public for using the power of the open Internet to guide us in determining how best to protect it.

B. The Continuing Need for Open Internet Protections

75. In its remand of the Commission's Open Internet Order, the D.C. Circuit affirmed the underlying basis for the Commission's open Internet rules, holding that "the Commission [had] more than adequately supported and explained its conclusion that edge provider innovation leads to the expansion and improvement of broadband infrastructure." The court also found "reasonable and grounded in substantial evidence" the Commission's finding that Internet openness fosters the edge provider innovation that drives the virtuous cycle. The record on remand continues to convince us that broadband providers—including mobile broadband providers-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. Today we take steps to ensure that the substantial benefits of Internet openness continue to be realized.

1. An Open Internet Promotes Innovation, Competition, Free Expression, and Infrastructure Deployment

76. In the 2014 Open Internet NPRM, we sought comment on and expressed our continued commitment to an important principle underlying the Commission's prior policies—that the Internet's openness promotes innovation, investment, competition, free expression, and other national broadband goals. The record before us convinces us that these findings, made by the Commission in 2010 and upheld by the D.C. Circuit, remain valid. If anything, the remarkable increases in investment and innovation seen in recent years-while the rules were in place—bear out the Commission's view. For example, in addition to broadband infrastructure investment, there has been substantial growth in the digital app economy, video over broadband, and VoIP, as well as a rise in mobile ecommerce. Overall Internet adoption has also increased since 2010. Both within the network and at its edges, investment and innovation have flourished while the open Internet rules were in force.

77. The record before us also overwhelmingly supports the

proposition that the Internet's openness is critical to its ability to serve as a platform for speech and civic engagement, and that it can help close the digital divide by facilitating the development of diverse content, applications, and services. The record also supports the proposition that the Internet's openness continues to enable a "virtuous [cycle] of innovation in which new uses of the networkincluding new content, applications, services, and devices-lead to increased end-user demand for broadband, which drives network improvements, which in turn lead to further innovative network uses." End users experienced the benefits of Internet openness that stemmed from the Commission's 2010 open Internet rules—increased consumer choice, freedom of expression, and innovation.

2. Broadband Providers Have the Incentive and Ability To Limit Openness

78. Broadband providers function as gatekeepers for both their end user customers who access the Internet, and for various transit providers, CDNs, and edge providers attempting to reach the broadband provider's end-user subscribers. As discussed in more detail below, broadband providers (including mobile broadband providers) have the economic incentives and technical ability to engage in practices that pose a threat to Internet openness by harming other network providers, edge providers, and end users.

a. Economic Incentives and Ability

79. In the 2014 Open Internet NPRM, we sought to update the record with information about new and continuing incentives for broadband providers to limit Internet openness. As explained in detail in the Open Internet Order, broadband providers not only have the incentive and ability to limit openness, but they had done so in the past. (As the Commission explained in the Open Internet Order, examples such as the Madison River case, the Comcast-Bit Torrent case, and various mobile wireless Internet providers restricting customers' use of competitive payment applications, competitive voice applications, and remote video applications, indicate that broadband providers have the technical ability to act on incentives to harm the open Internet. The D.C. Circuit also found that these examples buttressed the Commission's conclusion that broadband providers' incentives and ability to restrict Internet traffic could interfere with the Internet's openness.) The D.C. Circuit found that the

Commission "adequately supported and explained" that, absent open Internet rules, "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." The record generated in this proceeding convinces us that the Commission's conclusion in the Open Internet Order—that providers of broadband have a variety of strong incentives to limit Internet openness remains valid today.

80. Broadband providers' networks serve as platforms for Internet ecosystem participants to communicate, enabling broadband providers to impose barriers to end-user access to the Internet on one hand, and to edge provider access to broadband subscribers on the other. This applies to both fixed and mobile broadband providers. Although there is some disagreement among commenters, the record provides substantial evidence that broadband providers have significant bargaining power in negotiations with edge providers and intermediaries that depend on access to their networks because of their ability to control the flow of traffic into and on their networks. Another way to describe this significant bargaining power is in terms of a broadband provider's position as gatekeeper-that is, regardless of the competition in the local market for broadband Internet access, once a consumer chooses a broadband provider, that provider has a monopoly on access to the subscriber. Many parties demonstrated that both mobile and fixed broadband providers are in a position to function as a gatekeeper with respect to edge providers. Once the broadband provider is the sole provider of access to an end user, this can influence that network's interactions with edge providers, end users, and others. As the Commission and the court have recognized, broadband providers are in a position to act as a 'gatekeeper'' between end users' access to edge providers' applications, services, and devices and reciprocally for edge providers' access to end users. Broadband providers can exploit this role by acting in ways that may harm the open Internet, such as preferring their own or affiliated content, demanding fees from edge providers, or placing technical barriers to reaching end users. Without multiple, substitutable paths to the consumer, and the ability to select the most costeffective route, edge providers will be subject to the broadband provider's gatekeeper position. The D.C. Circuit noted that the Commission

"convincingly detailed" broadband providers' market position, which gives them "the economic power to restrict edge-provider traffic and charge for the services they furnish edge providers," and further stated that the Commission reasonably explained that "this ability to act as a 'gatekeeper' distinguishes broadband providers from other participants in the Internet marketplace who have no similar 'control [over] access to the Internet for their subscribers and for anyone wishing to reach those subscribers."" (We find, for example, that even though edge providers may possess bargaining power, they do not have the same ability as broadband providers to control the flow of traffic or block access to the Internet. With respect to mobile, the presence of some additional retail competition is not enough to alter our conclusion here.) The ability of broadband providers to exploit this gatekeeper role could be mitigated if consumers multi-homed (i.e., bought broadband service from multiple networks). However, multi-homing is not widely practiced and imposes significant additional costs on consumers. The gatekeeper role could also be mitigated if a consumer could easily switch broadband providers. But, as discussed further below, the evidence suggests otherwise.

81. The broadband provider's position as gatekeeper is strengthened by the high switching costs consumers face when seeking a new service. Among the costs that consumers may experience are: High upfront device installation fees; long-term contracts and early termination fees: the activation fee when changing service providers; and compatibility costs of owned equipment not working with the new service. Bundled pricing can also play a role, as "single-product subscribers are four times more likely to churn than tripleplay subscribers." These costs may limit consumers' willingness and ability to switch carriers, if such a choice is indeed available. Commenters also point to an information problem, whereby consumers are unsure about the causes of problems or limitations with their services-for example, whether a slow speed on an application is caused by the broadband provider or the edge provider—and as such consumers may not feel that switching providers will resolve their Internet access issues. Additionally, consumers on unlimited data plans may be confused by slowed data speeds because broadband providers have not adequately communicated contractually-imposed data management practices and usage thresholds. Switching costs are also a critical factor that negatively impacts mobile broadband consumers, in particular due to the informational uncertainties mentioned below, among other reasons. Ultimately, when consumers face this kind of friction in switching to meaningful competitive alternatives, it decreases broadband provider' responsiveness to consumer demands and limits the provider's incentives to improve their networks. Additionally, 45 percent of households have only a single provider option for 25 Mbps/3 Mbps broadband service, indicating that 45 percent of households do not have any choices to switch to at this critical level of service.

82. Broadband providers may seek to gain economic advantages by favoring their own or affiliated content over other third-party sources. Technological advances have given broadband providers the ability to block content in real time, which allows them to act on their financial incentives to do so in order to cut costs or prefer certain types of content. Data caps or allowances, which limit the amount and type of content users access online, can have a role in providing consumers options and differentiating services in the marketplace, but they also can negatively influence customer behavior and the development of new applications. Similarly, broadband providers have incentives to charge for prioritized access to end users or degrade the level of service provided to non-prioritized content. When bandwidth is limited during peak hours, its scarcity can cause reliability and quality concerns, which increases broadband providers' ability to charge for prioritization. Such practices could result in so-called "tolls" for edge providers seeking to reach a broadband provider's subscribers, leading to reduced innovation at the edge, as well as increased rates for end users, reducing consumer demand, and further disrupting the virtuous cycle. Commenters expressed considerable concern regarding the harmful effects of paid prioritization on Internet openness. Further, as discussed above, a broadband provider's incentive to favor affiliated content or the content of unaffiliated firms that pay for it to do so, to block or degrade traffic, to charge edge providers for access to end users, and to disadvantage non-prioritized transmission all increase when end users are less able to respond by switching to rival broadband providers.

83. In addition to the harms outlined above, broadband providers' behavior has the potential to cause a variety of

other negative externalities that hurt the open nature of the Internet. Broadband providers have incentives to engage in practices that will provide them short term gains but will not adequately take into account the effects on the virtuous cycle. In the Open Internet Order, the Commission found that the unaccounted-for harms to innovation are negative externalities, and are likely to be particularly large because of the rapid pace of Internet innovation, and wide-ranging because of the role of the Internet as a general purpose technology. Further, the Commission noted that a broadband provider may hesitate to impose costs on its own subscribers, but it will typically not take into account the effect that reduced edge provider investment and innovation has on the attractiveness of the Internet to end users that rely on other broadband providers—and will therefore ignore a significant fraction of the cost of forgone innovation. The record supports our view that these negative externality problems have not disappeared, and in some cases, may be more prevalent. In order to mitigate these negative results, the Commission needs to act to promote Internet openness.

84. A final point on this question of economic incentives and ability is worth noting. Broadband providers have the ability to act as gatekeepers even in the absence of "the sort of market concentration that would enable them to impose substantial price increases on end users." We therefore need not consider whether market concentration gives broadband providers the ability to raise prices. The Commission came to this conclusion in the Open Internet Order, and we conclude the same here. As the Commission noted in the Open Internet Order, threats to Internetenabled innovation, growth, and competition do not depend on broadband providers having market power with respect to their end users. In Verizon, the court agreed, explaining that "broadband providers' ability to impose restrictions on edge providers simply depends on end users not being fully responsive to the imposition of such restrictions." (We note further that, of course, our reclassification of broadband Internet access service as a "telecommunications service" subject to Title II below likewise does not rely on such a test or any measure of market power. Indeed, our reclassification decision is based on whether BIAS meets the statutory definition of a "telecommunications service," and not any additional economic circumstances.) As we have concluded in this section, this remains true today.

(We note, however, that in areas where there are limited competitive alternatives, this may exacerbate other problems such as the ability to switch from one provider to another.)

b. Technical Ability

85. As the Commission explained in the Open Internet Order, past instances of abuse indicate that broadband providers have the technical ability to act on incentives to harm the open Internet. Broadband providers have a variety of tools at their disposal that can be used to monitor and regulate the flow of traffic over their networks—giving them the ability to discriminate should they choose to do so. Techniques used by broadband providers to identify and select traffic may include approaches based on packet payloads (using deep packet inspection), network or transport layer headers (e.g., port numbers or priority markings), or heuristics (e.g., the size, sequencing, and/or timing of packets). Using these techniques, broadband providers may apply network practices to traffic that has a particular source or destination, that is generated by a particular application or by an application that belongs to a particular class of applications, that uses a particular application- or transport-layer protocol, or that is classified for special treatment by the user, application, or application provider. Application-specific network practices depend on the broadband provider's ability to identify the traffic associated with particular uses of the network. Some of these applicationspecific practices may be reasonable network management, e.g., tailored network security practices. However, some of these techniques may also be abused. Deep packet inspection, for example, may be used in a manner that may harm the open Internet, e.g., to limit access to certain Internet applications, to engage in paid prioritization, and even to block certain content. Similarly, traffic control algorithms can be abused, e.g., to give certain packets favorable placement in queues or to send packets along less congested routes in a manner contrary to end user preferences. Use of these techniques may ultimately affect the quality of service that users receive, which could effectively force edge providers to enter into paid prioritization agreements to prevent poor quality of content to end users.

3. Mobile Broadband Services

86. We have discussed above the incentives and ability of broadband providers to act in ways that limit Internet openness, regardless of the

specific technology platform used by the provider. A significant subject of discussion in the record, however, concerned mobile broadband providers specifically, and we therefore believe it is appropriate to address here the incentive and ability that these providers have to limit Internet openness. As the Commission noted in the Open Internet Order, "[c]onsumer choice, freedom of expression, end-user control, competition, and the freedom to innovate without permission are as important when end users are accessing the Internet via mobile broadband as via fixed." The Commission noted that "there have been instances of mobile providers blocking certain third-party applications, particularly applications that compete with the provider's own offerings. . . ." However, the Commission also noted the nascency of the mobile broadband industry, citing the recent development of "app" stores, and what it characterized at the time as "new business models for mobile broadband providers, including usagebased pricing." Furthermore, the Commission at that time found that "[m]obile broadband speeds, capacity, and penetration [were] typically much lower than for fixed broadband" and noted that carriers had only begun to offer 4G service.

87. Citing these factors, as well as greater consumer choice, "meaningful recent moves toward openness in and on mobile broadband networks," and the operational constraints faced by mobile broadband providers, the Commission applied its open Internet rules to mobile broadband, but distinguished between fixed and mobile broadband in some regards: While it applied the same transparency rule to both fixed and mobile network providers, it adopted a different noblocking standard for mobile broadband Internet access service, and excluded mobile broadband from the unreasonable discrimination rule. In the 2014 Open Internet NPRM, the Commission tentatively concluded that it should maintain the same approach going forward, but recognized that there have been significant changes since 2010 in the mobile marketplace. The Commission sought comment on whether those changes should lead it to revisit the treatment of mobile broadband services.

88. Today, we find that changes in the mobile broadband marketplace warrant a revised approach. We find that the mobile broadband marketplace has evolved, and continues to evolve, but is no longer in a nascent stage. As discussed below, mobile 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.

89. Network connection speed and data consumption have exploded. For 2010, Cisco reported an average mobile network connection speed of 709 kbps. Since that time there has been massive expansion of mobile broadband networks, providing vastly increased download speeds. For 2013, Cisco reported an average mobile connection speed of 2,058 kbps. This increase in speed is partially due to the deployment of faster network technologies. Currently, mobile broadband networks provide coverage and services using a variety of 3G and 4G technologies, including, most importantly, LTE. As a consequence of the growing deployment of next generation networks, there has been an increase of more than 200,000 percent in the number of LTE subscribers, from approximately 70,000 in 2010 to over 140 million in 2014. Concurrent with these substantial changes in mobile broadband deployment and download speeds, mobile data traffic has exploded, increasing from 388 billion MB in 2010 to 3.23 trillion MB in 2013. AT&T reports that its wireless data traffic has grown 100,000 percent between 2007 and 2014 and 20,000 percent over the past five years. T-Mobile states that "data usage continues to expand exponentially, with year-to-year increases of roughly 120 percent."

90. As consumers use smartphones and tablets more, they increasingly rely on mobile broadband as a pathway to the Internet. The Internet Association argues that mobile Internet access is essential, since many Americans "are wholly reliant on mobile wireless for Internet access." 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. Citing data from the Pew Research Center's Internet & American Life Project, OTI states that "[t]he share of Americans relying exclusively on their smartphone[s] to access the Internet is far higher among Hispanics, Blacks, and adults aged 18-29, and households earning less than \$30,000 a year." According to data from the National Health Interview Survey, 44 percent of households were "wirelessonly" during January–June 2014, compared to 31.6 percent during

January–June 2011. These data also show that 59.1 percent of adults living in poverty reside in wireless-only households, relative to 40.8 percent of higher income adults. 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. Microsoft states, for example, that, "with 'the pressure . . . only increasing to either go mobile or go home,' edge providers frequently introduce new edge services on mobile platforms first, and the success or failure of these edge providers' businesses often depends in large part on their mobile offerings.'

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. As discussed above, certain 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.

92. In view of the evidence showing the evolution of the mobile broadband marketplace, we conclude that it would best serve the public interest to revise our approach for mobile broadband services and apply the same openness requirements as those applied to providers of fixed broadband services. The Commission has long recognized that the Internet should remain open for consumers and innovators alike, regardless of the different technologies and services through which it may be accessed. Although the Commission found in 2010 that conditions at that time warranted a more limited application of open Internet rules to mobile broadband services, it nevertheless recognized the importance of freedom and openness for users of mobile broadband networks, finding that "consumer choice, freedom of expression, end-user control,

competition, and the freedom to innovate without permission are as important when end users are accessing the Internet via mobile broadband as via fixed." In contrast to the state of the mobile broadband marketplace when the Commission adopted the 2010 open Internet rules, the evidence in the record today shows how mobile broadband services have evolved to become essential, critical means of access to the Internet for millions of consumers every day. Because of this evolution and the widespread use of mobile broadband services, maintaining a regime under which fewer protections apply in a mobile environment risks creating a substantively different Internet experience for mobile broadband users as compared to fixed broadband users. Broadband users should be able to expect that they will be entitled to the same Internet openness protections no matter what technology they use to access the Internet. We agree with arguments made by a large number of commenters that applying a consistent set of requirements will help ensure that all consumers can benefit from full access to an open and robust Internet. We note that evidence in the record indicates that mobile broadband providers themselves have recognized the importance of open Internet practices for mobile broadband consumers.

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 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. Contrary to provider arguments that applying a broader set of openness requirements will stifle innovation and chill investment, we find that the rules we adopt today for all providers of services will promote innovation, investment, and competition. As we discuss above, an open Internet enables a virtuous cycle where new uses of the network drive consumer demand, which drives network improvements, which result in further innovative uses. We agree with commenters that "mobile is a key component" of the virtuous cycle. OTI comments that "a variety of economic analyses suggest that the Internet's openness is a key driver of its value Other economic studies have found that non-neutral conditions in the broadband market might maximize profits for broadband providers but would ultimately minimize consumer welfare There is significant evidence that a vibrant and neutral online economy is critical for a healthy technology industry, which is a significant creator of jobs in the U.S." We find that these arguments apply to mobile broadband providers as well as to fixed, and apply even though there may be more competition among mobile broadband providers.

95. We note that the Commission's experience with applying open platform rules to Upper 700 MHz C Block licensees, including Verizon Wireless, has shown that openness principles can be applied to mobile services without inhibiting a mobile provider's ability to compete and be successful in the marketplace. We find that it is reasonable to conclude that, even with broader application of Internet openness requirements, mobile broadband providers will similarly continue to compete and develop innovative products and services. We also expect that the force of consumer demand that led mobile broadband providers to invest in their networks over the past four years will likely continue to drive substantial investments in mobile broadband networks under the open Internet regime we adopt today.

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. 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. As Consumers Union observes, many mobile broadband provider practices are non-transparent, because customers receive "no warning or explanation of when their speeds will be slowed down." Other commenters such as OTI 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" Microsoft also describes further potential for abuse based on its experience in other countries without open Internet protections, claiming, for example, that "several broadband access providers around the world have interfered or degraded Skype traffic on their networks." A recent survey of European Internet users found that respondents reported experiencing problems with ''blocking of internet content." Mobile services notably accounted for a significant percentage of negative experiences reported in the survey. OTI argues that, even with competition, mobile providers have an interest in seeking rents from edge providers and "in securing a competitive advantage for their own competing apps, content and services." We agree, and find that the rules we adopt today for mobile network providers will help 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. The level of wireless churn, when viewed in conjunction with data on consumer satisfaction, is consistent with the existence of important switching costs for customers. Based on results from surveys, OTI and Consumers Union argue that switching costs have depressed mobile wireless churn rates, meaning that customers may remain with their service providers even when they are dissatisfied. Consumers Union cites a February 2015 Consumer Reports survey showing that "27 percent of mobile broadband consumer[s] who are dissatisfied with their mobile broadband service provider are reluctant to switch carriers" due to several factors. That 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. 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. For example, Vonage argues that "recent mergers between AT&T and Leap, and T-Mobile and MetroPCS have reduced the ability of wireless end users to switch to competing providers in the event of potential discrimination against the edge services they may want to access." 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.

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. OTI and Consumers Union argue that moving multiple members of a shared or family plan may be particularly expensive, since "[n]ot only do groups face the cost of multiple ETFs, but frequently the contract termination dates become nonsynchronous due to the addition of new lines and individuals upgrading their devices at different points in time." Furthermore, OTI and Consumers Union argue that these costs affect an increasingly large proportion of consumers, since the penetration of shared plans has increased such that the majority of AT&T and Verizon Wireless customers now have shared plans.

100. AT&T, T-Mobile, and Verizon argue that the factors that led the Commission to adopt a more limited set of openness rules for mobile in 2010 remain valid today. They argue that mobile broadband networks should not be viewed as mature as mobile technologies continue to develop and evolve. They also contend that the extraordinary growth in use of mobile broadband services requires that providers have more flexibility to be able to handle the increased traffic and ensure quality of service for subscribers. T-Mobile, for example, asserts that "while mobile networks are more robust and offer greater speeds and capacity than they did when the 2010 rules were enacted, they also face greater demands; their need for agile and dynamic network management tools has actually increased."

101. We recognize that mobile service providers must take into account factors such as mobility and reliance on spectrum. As discussed more fully below in the context of each of the rules, however, we find that the requirements we adopt today are sufficiently tailored to provide carriers with the flexibility they need to accommodate these conditions. Moreover, as described further below, we conclude that retaining an exception to the noblocking rule, the no-throttling rule, and the no-unreasonable interference/ disadvantage standard we adopt today for reasonable network management will allow sufficient flexibility for mobile service providers.

4. The Commission Must Act To Preserve Internet Openness

102. Given that broadband providers-both fixed and mobile-have both the incentives and ability to harm the open Internet, we again conclude that the relatively small incremental burdens imposed by our rules are outweighed by the benefits of preserving the open nature of the Internet, including the continued growth of the virtuous cycle of innovation, consumer demand, and investment. We note, for example, that the disclosure requirements adopted in this order are widely understood, have industry-based definitions, and are commonly used in commercial Service Level Agreements by many broadband providers. Open Internet rules benefit investors, innovators, and end users by providing more certainty to each regarding broadband providers' behavior, and helping to ensure the market is conducive to optimal use of the Internet. Open Internet rules are also critical for ensuring that people living and working in rural areas can take advantage of the substantial benefits that the open Internet has to offer. In minority communities where many individuals' only Internet connection may be through a mobile device, robust open Internet rules help make sure these communities are not negatively impacted by harmful broadband provider conduct. Such rules additionally provide essential safeguards to ensure that the Internet flourishes as a platform for education and research.

103. The Commission's historical open Internet policies and rules have blunted the incentives, discussed above, to engage in behavior harmful to the open Internet. Commenters who argue that rules are not necessary overlook the role that the Commission's rules and policies have played in fostering that result. Without rules in place to protect the open Internet, the overwhelming incentives broadband providers have to act in ways that are harmful to investment and innovation threaten both broadband networks and edge content. Paid prioritization agreements, for example, have the potential to distort the market by causing prices not to reflect efficient cost recovery and by altering consumer choices for content and edge providers. The record reflects the view that paid arrangements for priority treatment, such as broadband providers discriminating among content providers or prioritizing one provider's or its own content over others, likely damage the open Internet, harming competition and consumer choice. Additionally, blocking and throttling harm a consumer's right to access lawful content, applications, and services, and to use non-harmful devices.

C. Strong Rules That Protect Consumers From Practices That Can Threaten the Open Internet

104. We are keenly aware that in the wake of the Verizon decision, there are no rules in place to prevent broadband providers from engaging in conduct harmful to Internet openness, such as blocking a consumer from accessing a requested Web site or degrading the performance of an innovative Internet application. (We acknowledge other laws address behavior similar to that which our rules are designed to prevent; however, as discussed below, we do not find existing laws sufficient to adequately protect consumers' access to the open Internet. For example, some parties have suggested that existing antitrust laws would address discriminatory conduct of an anticompetitive nature. We also note that certain "no blocking" obligations continue to apply to the use of Upper 700 MHz C Block licenses.) While many providers have indicated that, at this time, they do not intend to depart from the previous rules, an open Internet is too important to consumers and innovators to leave unprotected. Therefore, we today reinstate strong, enforceable open Internet rules. As in 2010, we believe that conduct-based rules targeting specific practices are necessary.

105. *No-Blocking*. First, we adopt a bright-line rule prohibiting broadband providers from blocking lawful content, applications, services, or non-harmful devices. This "no-blocking" principle has long been a cornerstone of the Commission's policies. While first applied in the Internet context as part of the Commission's *Internet Policy Statement*, the no-blocking concept dates back to the Commission's protection of end users' rights to attach lawful, non-harmful devices to communications networks.

106. No-Throttling. Second, we adopt a separate bright-line rule prohibiting broadband providers from impairing or degrading lawful Internet traffic on the basis of content, application, service, or use of non-harmful device. This conduct was prohibited under the commentary to the no-blocking rule adopted in the 2010 Open Internet Order. However, to emphasize the importance of this concept we delineate under a separate rule a ban on impairment or degradation, to prevent broadband providers from engaging in behavior other than blocking that negatively impacts consumers' use of content, applications, services, and devices.

107. *No Paid Prioritization.* Third, we respond to the deluge of public comment expressing deep concern about paid prioritization. Under the rule we adopt today, the Commission will ban all paid prioritization subject to a narrow waiver process.

108. No-Unreasonable Interference/ Disadvantage Standard. In addition to these three bright-line rules, we also set forth a no-unreasonable interference/ disadvantage standard, under which the Commission can prohibit practices that unreasonably interfere with the ability of consumers or edge providers to select, access, and use broadband Internet access service to reach one another, thus causing harm to the open Internet. This no-unreasonable interference/disadvantage standard will operate on a case-by-case basis and is designed to evaluate other current or future broadband Internet access provider policies or practices—not covered by the bright-line rules— and prohibit those that harm the open Înternet.

109. Transparency Requirements. We also adopt enhancements to the existing transparency rule to more effectively serve end-user consumers, edge providers of broadband products and services, and the Internet community. These enhanced transparency requirements are modest in nature, and we decline to adopt requirements proposed in the NPRM that raised concern for smaller broadband providers in particular, such as disclosures as to the source of congestion.

1. Clear, Bright Line Rules

110. The record in this proceeding reveals that three practices in particular demonstrably harm the open Internet: Blocking, throttling, and paid prioritization. For the reasons described below, we find each of these practices is inherently unjust and unreasonable, in violation of section 201(b) of the Act, and that these practices threaten the virtuous cycle of innovation and investment that the Commission intends to protect under its obligation and authority to take steps to promote broadband deployment under section 706 of the 1996 Act. We accordingly adopt bright-line rules banning blocking, throttling, and paid prioritization by providers of both fixed and mobile broadband Internet access service.

a. Preventing Blocking of Lawful Content, Applications, Services, and Non-Harmful Devices

111. We continue to find, for the same reasons the Commission found in the 2010 Open Internet Order and reiterated in the 2014 Open Internet NPRM, that "the freedom to send and receive lawful content and to use and provide applications and services without fear of blocking is essential to the Internet's openness." Because of broadband providers' incentives to block competitors' content, the need to protect a consumer's right to access lawful content, applications, services, and to use non-harmful devices is as important today as it was when the Commission adopted the first no-blocking rule in 2010.

112. In the 2014 Open Internet NPRM, the Commission tentatively concluded that it should re-adopt the text of the vacated no-blocking rule. The record overwhelmingly supports the notion of a no-blocking principle and re-adopting the text of the original rule. (A broad cross-section of broadband providers, edge providers, public interest organizations, and individuals support this approach.) Further, we note that many broadband providers still voluntarily continue to abide by the 2010 no-blocking rule, even though they have not been legally required to do so by a rule of general applicability since the Verizon decision. After consideration of the record and guidance from the D.C. Circuit, we adopt the following no-blocking rule applicable to both fixed and mobile broadband providers of broadband Internet access service:

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 nonharmful devices, subject to reasonable network management.

113. Similar to the 2010 no-blocking rule, the phrase "content, applications, and services" again refers to all traffic transmitted to or from end users of a broadband Internet access service, including traffic that may not fit clearly into any of these categories. Further, the no-blocking rule adopted today again

applies to transmissions of lawful content and does not prevent or restrict a broadband provider from refusing to transmit unlawful material, such as child pornography or copyrightinfringing materials. (Similar to the 2010 no-blocking rule, this obligation does not impose any independent legal obligation on broadband providers to be the arbiter of what is lawful.) Today's no-blocking rule also entitles end users to connect, access, and use any lawful device of their choice, provided that the device does not harm the network. The no-blocking rule prohibits network practices that block a specific application or service, or any particular class of applications or services, unless it is found to be reasonable network management. Finally, as with the 2010 no-blocking rule, today's no-blocking rule prohibits broadband providers from charging edge providers a fee to avoid having the edge providers' content, service, or application blocked from reaching the broadband provider's enduser customer. (We note that during oral argument in the Verizon case, Verizon told the court 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.)

114. Rejection of the Minimum Level of Access Standard. The 2014 Open Internet NPRM proposed that the noblocking rule would prohibit broadband providers from depriving edge providers of a minimum level of access to the broadband provider's subscribers and sought comment on how to define that minimum level of service. After consideration of the record, we reject the minimum level of access standard. Broadband providers, edge providers, public interest organizations, and other parties note the practical and technical difficulties associated with setting any such minimum level of access. For example, some parties note the uncertainty created by an indefinite standard. Other parties observe that in creating any such standard of service for no-blocking, the Commission risks jeopardizing innovation. We agree with these arguments and many others in the record expressing concern with the

proposed minimum level of access standard.

115. The no-blocking rule we adopt today prohibits broadband providers from blocking access to lawful Internet content, applications, services, and nonharmful devices. We believe that this approach will allow broadband providers to honor their service commitments to their subscribers without relying upon the concept of a specified level of service to those subscribers or edge providers under the no-blocking rule. We further believe that the separate no-throttling rule discussed below provides appropriate protections against harmful conduct that degrades traffic but does not constitute outright blocking.

116. *Application of the No-Blocking Rule to Mobile.* In 2010, the Commission limited the no-blocking rule for mobile to lawful Web sites and applications that competed with a provider's voice or video telephony services, subject to reasonable network management. The 2014 Open Internet NPRM, citing "the operational constraints that affect mobile broadband services, the rapidly evolving nature of the mobile broadband technologies, and the generally greater amount of consumer choice for mobile broadband services than for fixed,' proposed to retain the 2010 no-blocking rule. The Commission sought comment on this proposal.

117. For the reasons set forth above, including consumer expectations, the Commission's experience with open Internet regulations in the 700 MHz C Block, and the advances in the mobile broadband industry since 2010, we conclude instead that the same noblocking rule should apply to both fixed and mobile broadband Internet access services. Accordingly, as with fixed service, a consumer's mobile broadband provider cannot block a consumer from accessing lawful content, applications, services, or non-harmful devices, regardless of whether the content, applications, services, or devices (In evaluating the reasonable network management exception to the noblocking rule, the Commission will drawing upon its experience with the no-blocking rule in the 700 MHz C Block.) compete with a provider's own offerings, subject to reasonable network management.

118. All national mobile broadband providers, among others, opposed the application of the broader no-blocking rule to mobile broadband, arguing, for example, that mobile broadband providers need the ability to block unwanted traffic and spam. They also argue that the particular challenges of managing a mobile broadband network, for example the unknown effects of apps, require additional flexibility to block traffic. As discussed below, we recognize that additional flexibility may be required in mobile network management practices, but find that the reasonable network management exception we adopt today allows sufficient flexibility: The blocking of harmful or unwanted traffic remains a legitimate network management purpose, and is permissible when pursued through reasonable network management practices.

b. Preventing Throttling of Lawful Content, Applications, Services, and Non-Harmful Devices

119. In the 2014 Open Internet NPRM, the Commission proposed that degradation of lawful content or services below a specified level of service would violate a no-blocking rule. While certain broadband Internet access provider conduct may result in degradation of an end user's Internet experience that is tantamount to blocking, we believe that this conduct requires delineation in an explicit rule rather than through commentary as part of the no-blocking rule. Thus, we adopt a separate no-throttling rule applicable to both fixed and mobile providers of broadband Internet access service:

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.

120. With the no-throttling rule, we ban conduct that is not outright blocking, but inhibits the delivery of particular content, applications, or services, or particular classes of content, applications, or services. Likewise, we prohibit conduct that impairs or degrades lawful traffic to a non-harmful device or class of devices. We interpret this prohibition to include, for example, any conduct by a broadband Internet access service provider that impairs, degrades, slows down, or renders effectively unusable particular content, services, applications, or devices, that is not reasonable network management. For purposes of this rule, the meaning of "content, applications, and services" has the same as the meaning given to this phrase in the no-blocking rule. Like the no-blocking rule, broadband providers may not impose a fee on edge providers to avoid having the edge providers' content, service, or application throttled. Further, transfers of unlawful content or unlawful transfers of content are not protected by the no-throttling rule. We will consider

potential violations of the no-throttling rule under the enforcement provisions outlined below.

121. We find that a prohibition on throttling is as necessary as a rule prohibiting blocking. Without an equally strong no-throttling rule, parties note that the no-blocking rule will not be as effective because broadband providers might otherwise engage in conduct that harms the open Internet but falls short of outright blocking. For example, the record notes the existence of numerous practices that broadband providers can engage in to degrade an end user's experience.

122. Because our no-throttling rule addresses instances in which a broadband provider targets particular content, applications, services, or nonharmful devices, it does not address a practice of slowing down an end user's connection to the Internet based on a choice made by the end user. For instance, a broadband provider may offer a data plan in which a subscriber receives a set amount of data at one speed tier and any remaining data at a lower tier. If the Commission were concerned about the particulars of a data plan, it could review it under the no-unreasonable interference/ disadvantage standard. In contrast, if a broadband provider degraded the delivery of a particular application (e.g., a disfavored VoIP service) or class of application (e.g., all VoIP applications), it would violate the bright-line nothrottling rule. We note that userselected data plans with reduced speeds must comply with our transparency rule, such that the limitations of the plan are clearly and accurately communicated to the subscriber.

123. The no-throttling rule also addresses conduct that impairs or degrades content, applications, or services that might compete with a broadband provider's affiliated content. For example, if a broadband provider and an unaffiliated entity both offered over-the-top applications, the nothrottling rule would prohibit broadband providers from constraining bandwidth for the competing over-thetop offering to prevent it from reaching the broadband provider's end user in the same manner as the affiliated application.

124. As in the 2010 Open Internet Order, we continue to recognize that in order to optimize the end-user experience, broadband providers must be permitted to engage in reasonable network management practices. We emphasize, however, that to be eligible for consideration under the reasonable network management exception, a network management practice that would otherwise violate the nothrottling rule must be used reasonably and primarily for network management purposes, and not for business purposes. (While not within the definition of "throttling" for purposes of our no-throttling rule, the slowing of subscribers' content on an application agnostic basis, including as an element of subscribers' purchased service plans, will be evaluated under the transparency rule and the nounreasonable interference/disadvantage standard.)

c. No Paid Prioritization

125. In the 2014 Open Internet NPRM, the Commission sought comment on suggestions to impose a flat ban on paid prioritization services, including whether all paid prioritization practices, or some of them, could be treated as per se violations of the commerciallyreasonable standard or any other standard based on any source of legal authority. For reasons explained below, we conclude that paid prioritization network practices harm consumers, competition, and innovation, as well as create disincentives to promote broadband deployment and, as such, adopt a bright-line rule against such practices. Accordingly, today we ban arrangements in which the broadband service provider accepts consideration (monetary or otherwise) from a third party to manage the network in a manner that benefits particular content, applications, services, or devices. We also ban arrangements where a provider manages its network in a manner that favors the content, applications, services or devices of an affiliated entity. (We consider arrangements of this kind to be paid prioritization, even when there is no exchange of payment or other consideration between the broadband Internet access service provider and the affiliated entity.) Any broadband provider that engages in such practices will be subject to enforcement action, including forfeitures and other penalties. (Other forms of traffic prioritization, including practices that serve a public safety purpose, may be acceptable under our rules as reasonable network management.) We adopt the following rule banning paid prioritization arrangements:

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

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.

126. The paid prioritization ban we adopt today is based on the record that has developed in this proceeding. The record is rife with commenter concerns regarding preferential treatment arrangements, with many advocating a flat ban on paid prioritization. Commenters assert that permitting paid prioritization will result in the bifurcating of the Internet into a "fast" lane for those willing and able to pay and a "slow" lane for everyone else. As several commenters observe, allowing for the purchase of priority treatment can lead to degraded performance-in the form of higher latency, increased risk of packet loss, or, in aggregate, lower bandwidth—for traffic that is not covered by such an arrangement. Commenters further argue that paid prioritization will introduce artificial barriers to entry, distort the market, harm competition, harm consumers, discourage innovation, undermine public safety and universal service, and harm free expression. Vimeo, for instance, argues that paid prioritization "would disadvantage user-generated video and independent filmmakers" that lack the resources of major film studios to pay priority rates for dissemination of content. Engine Advocacy meanwhile asserts that "[s]ome unfunded early startups may not be able to afford [to pay for priority treatment] (particularly if the product would be data-intensive) and will not start a company," resulting in "reduce[d] entrepreneurship." Commenters assert that if paid prioritization became widespread, it would make reliance on consumers' ordinary, non-prioritized access to the Internet an increasingly unattractive and competitively nonviable option. The Commission's conclusion is supported by a well-established body of economic literature, (The access provided by the core network is an intermediate input into the myriad of final products produced by edge providers. While it is granted that for a firm selling final goods, price discrimination can be both profitable and enhance welfare, it has been argued that the reverse is also true when intermediate goods are considered.) including Commission staff working papers.

127. It is well-established that broadband providers have both the incentive and ability to engage in paid prioritization. In its *Verizon* opinion, the DC Circuit noted that providers "have powerful incentives to accept fees from edge providers, either in return for

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excluding their competitors or for granting them prioritized access to end users." Indeed, at oral argument Verizon's counsel announced that "but for [the 2010 Open Internet Order] rules we would be exploring [such] commercial arrangements." While we appreciate that several broadband providers have claimed that they do not engage in paid prioritization or that they have no plans to do so, (For example, we note that in Verizon's letter to Chairman Leahy, the company states "[a]s we have said before, and affirm again here, Verizon has no plans to engage in paid prioritization of Internet traffic." Verizon Letter to Leahy at 1. However, in contrast to this statement, at oral argument in the Verizon case, counsel for Verizon explained that the company would pursue such arrangements if not for the 2010 Open Internet rules which prevented them.) such statements do not have the force of a legal rule that prevents them from doing so in the future. The future openness of the Internet should not turn on the decision of a particular company. We are concerned that if paid prioritization practices were to become widespread, the damage to Internet openness could be difficult to reverse. We agree that "[u]nraveling a web of discriminatory deals after significant investments have been made, business plans have been built, and technologies have been deployed would be a complicated undertaking both logistically and politically." Further, documenting the harms could prove challenging, as it is impossible to identify small businesses and new applications that are stifled before they become commercially viable. Prioritizing some traffic over others based on payment or other consideration from an edge provider could fundamentally alter the Internet as a whole by creating artificial motivations and constraints on its use, damaging the web of relationships and interactions that define the value of the Internet for both end users and edge providers, and posing a risk of harm to consumers, competition, and innovation. Thus, because of the very real concerns about the chilling effects that preferential treatment arrangements could have on the virtuous cycle of innovation, consumer demand, and investment, we adopt a bright-line rule banning paid prioritization arrangements. (Some commenters argue that consumer disclosures about such practices are sufficient. However, the average consumer does not have the time or specialized knowledge to sort through the implications, and

regardless, in many areas of the country, consumers simply do not have multiple, equivalent choices.)

128. In arguing against such a ban, ADTRAN asserts that it would "cement the advantages enjoyed by the largest edge providers that presently obtain the functional equivalent of priority access by constructing their own extensive networks that interconnect directly with the ISPs." We reject this argument. CDT correctly observes that "[e]stablished entities with substantial resources will always have a variety of advantages" over less established ones, notwithstanding any rules we adopt. We do not seek to disrupt the legitimate benefits that may accrue to edge providers that have invested in enhancing the delivery of their services to end users. On the contrary, such investments may contribute to the virtuous cycle by stimulating further competition and innovation among edge providers, to the ultimate benefit of consumers. We also clarify that the ban on paid prioritization does not restrict the ability of a broadband provider and CDN to interconnect.

129. We find that a flat ban on paid prioritization has advantages over alternative approaches identified in the record. Prohibiting this practice outright will help to foster broadband network investment by setting clear boundaries of acceptable and unacceptable behavior. It will also protect consumers against a harmful practice that may be difficult to understand, even if disclosed. In addition, this approach relieves small edge providers, innovators, and consumers of the burden of detecting and challenging instances of harmful paid prioritization. Given the potential harms to the virtuous cycle, we believe it is more appropriate to impose an *ex ante* ban on such practices, while entertaining waiver requests under exceptional circumstances.

130. Under our longstanding waiver rule, the Commission may waive any rule "in whole or in part, for good cause shown." General waiver of the Commission's rules is appropriate only if special circumstances warrant a deviation from the general rule, and such a deviation will serve the public interest. In some cases, however, the Commission adopts specific rules concerning the factors that will be used to examine a waiver or exemption request. We believe that such guidance is appropriate here to make clear the very limited circumstances in which the Commission would be willing to allow paid prioritization. Accordingly, we adopt a rule concerning waiver of the

paid prioritization ban that establishes a balancing test, as follows:

The Commission may waive the ban on paid prioritization only if the petitioner demonstrates that the practice would provide some significant public interest benefit and would not harm the open nature of the Internet.

131. In support of any waiver request, the applicant therefore must make two related showings. First, the applicant must demonstrate that the practice will have some significant public interest benefit, such as providing evidence that the practice furthers competition, innovation, consumer demand, or investment. Second, the applicant must demonstrate that the practice does not harm the nature of the open Internet, including, but not limited to, providing evidence that the practice:

• Does not materially degrade or threaten to materially degrade the broadband Internet access service of the general public;

- does not hinder consumer choice;
- does not impair competition, innovation, consumer demand, or investment; and

• does not impede any forms of expressions, types of service, or points of view.

132. An applicant seeking waiver relief under this rule faces a high bar. We anticipate granting such relief only in exceptional cases. (For instance, several commenters argue that paid prioritization arrangements could improve the provision of telemedicine services.)

2. No Unreasonable Interference or Unreasonable Disadvantage Standard for Internet Conduct

133. In the 2014 Open Internet NPRM, the Commission tentatively concluded that it should adopt a rule requiring broadband providers to use "commercially reasonable" practices in the provision of broadband Internet access service, and sought comment on this approach. (The Commission also tentatively concluded that it should operate separately from the proposed no-blocking rule, *i.e.*, conduct acceptable under the no-blocking rule would still be subject to independent examination under the "commercially reasonable" standard, and sought comment on this approach.) The Commission also sought comment on whether there were alternative legal standards that the Commission should consider, or whether it should adopt a rule that prohibits unreasonable discrimination and, if so, what legal authority and theories it should rely upon to do so. In addition, the Commission sought comment on how it

can ensure that the rule it adopts sufficiently protects against harms to the open Internet, including broadband providers' incentives to disadvantage edge providers or classes of edge providers in ways that would harm Internet openness.

134. The Commission sought comment on what factors it should adopt to ensure commercially reasonable practices that will protect and promote Internet openness, and tentatively concluded that a review of the totality of the circumstances should be preserved to ensure that rules can be applied evenly and fairly in response to changing circumstances. The Commission also recognized that there have been significant changes in the mobile marketplace since 2010, and sought comment on whether and, if so, how these changes should affect the Commission's treatment of mobile services under the rules. (Specifically, the Commission sought comment on whether, under the commercially reasonable rule, mobile networks should be subject to the same totality-of-the circumstances test as fixed broadband, and whether the Commission should apply the commercially reasonable legal standard to mobile broadband.)

135. Preventing Unreasonable Interference or Unreasonable Disadvantage that Harms Consumers and Edge Providers. The three brightline rules that we adopt today prohibit specific conduct that harms the open Internet. The open nature of the Internet has allowed new products and services to flourish and has broken down geographic barriers to communication, allowing information to flow freely. We believe the rules we adopt today will alleviate many of the concerns identified in the record regarding broadband provider practices that could upset these positive outcomes. However, while these three bright-line rules comprise a critical cornerstone in protecting and promoting the open Internet, we believe that there may exist other current or future practices that cause the type of harms our rules are intended to address. For that reason, we adopt a rule setting forth a nounreasonable interference/disadvantage standard, under which the Commission can prohibit, on a case-by-case basis, practices that unreasonably interfere with or unreasonably disadvantage the ability of consumers to reach the Internet content, services, and applications of their choosing or of edge providers to access consumers using the Internet.

136. It is critical that access to a robust, open Internet remains a core feature of the communications

landscape, but also that there remains leeway for experimentation with innovative offerings. Based on our findings that broadband providers have the incentive and ability to discriminate in their handling of network traffic in ways that can harm the virtuous cycle of innovation, increased end-user demand for broadband access, and increased investment in broadband network infrastructure and technologies, we conclude that a no-unreasonable interference/disadvantage standard to protect the open nature of the Internet is necessary. We adopt this standard to prohibit practices in the broadband Internet access provider's network that harm Internet openness, similar to the approach proposed by the Higher Education coalition and the Center for Democracy and Technology. Specifically, we require that:

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. (As in the no throttling rule, we include classes of content, applications, services, or devices.)

137. This "no-unreasonable interference/disadvantage" standard will be applied to carefully balance the benefits of innovation against harm to end users and edge providers. It also protects free expression, thus fulfilling the congressional policy that the Internet "offer[s] a forum for true diversity of political discourse, unique opportunities for cultural development, and myriad avenues for intellectual activity." As the Commission found in 2010, and the Verizon court upheld, "[r]estricting edge providers' ability to reach end users, and limiting end users' ability to choose which edge providers to patronize, would reduce the rate of innovation at the edge and, in turn, the likely rate of improvements to network infrastructure. Similarly, restricting the ability of broadband providers to put the network to innovative uses may reduce the rate of improvements to network infrastructure." Under the standard that we adopt today, the Commission can protect against harm to end users' or edge providers' ability to use broadband Internet access service to reach one another. Compared to the no unreasonable discrimination standard adopted by the Commission in 2010, the standard we adopt today is specifically

designed to protect against harms to the open nature of the Internet. We note that the standard we adopt today represents our interpretation of sections 201 and 202 in the broadband Internet access context and, independently, our interpretation—upheld by the *Verizon* court—that rules to protect Internet openness promote broadband deployment via the virtuous cycle under section 706 of the 1996 Act.

a. Factors To Guide Application of the Rule

138. We adopt our tentative conclusion to follow a case-by-case approach, considering the totality of the circumstances, when analyzing whether conduct satisfies the no-unreasonable interference/disadvantage standard to protect the open Internet. Below we discuss a non-exhaustive list of factors we will use to assess such practices. In adopting this standard, we enable flexibility in business arrangements and ensure that innovation in broadband and edge provider business models is not unduly curtailed. We are mindful that vague or unclear regulatory requirements could stymie rather than encourage innovation, and find that this approach combined with the factors set out below will provide sufficient certainty and guidance to consumers, broadband providers, and edge providers—particularly smaller entities that might lack experience dealing with broadband providers—while also allowing parties flexibility in developing new services. (We also note that this Order permits parties to seek advisory opinions regarding application of the Commission's open Internet rules. We view these processes as complementary methods by which parties can seek guidance as to how the open Internet rules apply to particular conduct.) We note that in addition to the following list, there may be other considerations relevant to determining whether a particular practice violates the no-unreasonable interference/ disadvantage standard. This approach of adopting a rule of general conduct, followed by guidance as to how to apply it on a case-by-case basis, is not novel. The Commission took a similar approach in 2010 when it adopted the "no unreasonable discrimination" rule, which was followed by a discussion of four factors (end-user control, useagnostic discrimination, standard practices, and transparency). Indeed, for this new rule, we are providing at least as much guidance, if not more, as we did in 2010 for the application of the no unreasonable discrimination rule.

139. *End-User Control.* A practice that allows end-user control and is

consistent with promoting consumer choice is less likely to unreasonably interfere with or cause an unreasonable disadvantage affecting the end user's ability to use the Internet as he or she sees fit. The Commission has long recognized that enabling consumer choice is the best path toward ensuring competitive markets, economic growth. and technical innovation. It is therefore critical that consumers' decisions, rather than those of service providers, remain the driving force behind the development of the Internet. To this end, practices that favor end-user control and empower meaningful consumer choice are more likely to satisfy the no-unreasonable interference/disadvantage standard than those that do not. However, as was true in 2010, we are cognizant that user control and network control are not mutually exclusive, and that many practices will fall somewhere on a spectrum from more end-user-controlled to more broadband provider-controlled. Further, there may be practices controlled entirely by broadband providers that nonetheless satisfy the no-unreasonable interference/ disadvantage standard. In all events, however, we emphasize that such practices should be fully transparent to the end user and effectively reflect end users' choices.

140. Competitive Effects. As the Commission has found previously, broadband providers have incentives to interfere with and disadvantage the operation of third-party Internet-based services that compete with the providers' own services. Practices that have anti-competitive effects in the market for applications, services, content, or devices would likely unreasonably interfere with or unreasonably disadvantage edge providers' ability to reach consumers in ways that would have a dampening effect on innovation, interrupting the virtuous cycle. As such, these anticompetitive practices are likely to harm consumers' and edge providers' ability to use broadband Internet access service to reach one another. Conversely, enhanced competition leads to greater options for consumers in services, applications, content, and devices, and as such, practices that would enhance competition would weigh in favor of promoting consumers' and edge providers' ability to use broadband Internet access service to reach one another. In examining the effect on competition of a given practice, we will also review the extent of an entity's vertical integration as well

as its relationships with affiliated entities.

141. Consumer Protection. The nounreasonable interference/disadvantage standard is intended to serve as a strong consumer protection standard. It prohibits broadband providers from employing any deceptive or unfair practice that will unreasonably interfere with or disadvantage end-user consumers' ability to select, access, or use broadband services, applications, or content, so long as the services are lawful, subject to the exception for reasonable network management. For example, unfair or deceptive billing practices, as well as practices that fail to protect the confidentiality of end users' proprietary information, will be unlawful if they unreasonably interfere with or disadvantage end-user consumers' ability to select, access, or use broadband services, applications, or content, so long as the services are lawful, subject to the exception for reasonable network management. While each individual case will be evaluated on its own merits, this rule is intended to include protection against fraudulent practices such as "cramming" and 'slamming'' that have long been viewed as unfair and disadvantageous to consumers.

142. Effect on Innovation, Investment, or Broadband Deployment. As the Verizon court recognized, 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. As such, practices that stifle innovation, investment, or broadband deployment would likely unreasonably interfere with or unreasonably disadvantage end users' or edge providers' use of the Internet under the legal standard we set forth today.

143. Free Expression. As Congress has recognized, the Internet "offer[s] a forum for a true diversity of political discourse, unique opportunities for cultural development, and myriad avenues for intellectual activity.' Practices that threaten the use of the Internet as a platform for free expression would likely unreasonably interfere with or unreasonably disadvantage consumers' and edge providers' ability to use BIAS to communicate with each other, thereby causing harm to that ability. Further, such practices would dampen consumer demand for broadband services, disrupting the virtuous cycle, and harming end user and edge provider use of the Internet under the legal standard we set forth today. (We also note that the nounreasonable interference/disadvantage standard does not unconstitutionally burden any of the First Amendment rights held by broadband providers because broadband providers are conduits, not speakers, with respect to broadband Internet access services.)

144. Application Agnostic. Application-agnostic (sometimes referred to as use-agnostic) practices likely do not cause an unreasonable interference or an unreasonable disadvantage to end users' or edge providers' ability to use BIAS to communicate with each other. (A network practice is application-agnostic if it does not differentiate in treatment of traffic, or if it differentiates in treatment of traffic without reference to the content, application, or device. A practice is application-specific if it is not application-agnostic. Applicationspecific network practices include, for example, those applied to traffic that has a particular source or destination, that is generated by a particular application or by an application that belongs to a particular class of applications, that uses a particular application- or transport-layer protocol, or that has particular characteristics (e.g., the size, sequencing, and/or timing of packets). We note, however, that there do exist circumstances where application-agnostic practices raise competitive concerns, and as such may violate our standard to protect the open Internet.) Application-agnostic practices do not interfere with end users' choices about which content, applications, services, or devices to use, nor do they distort competition and unreasonably disadvantage certain edge providers. As such, they likely would not cause harm by unreasonably interfering with or disadvantaging end users or edge providers' ability to communicate using BIAS.

145. Standard Practices. In evaluating whether a practice violates our nounreasonable interference/disadvantage standard to protect Internet openness, we will consider whether a practice conforms to best practices and technical standards adopted by open, broadly representative, and independent Internet engineering, governance initiatives, or standards-setting organization. Consideration of input from technical advisory groups accounts for the important role these organizations have to play in developing communications policy. We make clear, however, that we are not delegating authority to interpret or implement our rules to outside bodies.

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b. Application to Mobile

146. As discussed earlier, because of changes that have occurred in the mobile marketplace since 2010, including the widespread deployment of 4G LTE networks and the significant increase in use of mobile broadband Internet access services, we find that it is appropriate to revise our approach for mobile broadband and apply the same openness protections to both fixed and mobile broadband Internet access services, including prohibiting mobile broadband providers from engaging in practices that harm Internet openness. We find that applying the nounreasonable interference/disadvantage standard to mobile broadband services will help ensure that consumers using mobile broadband services are protected against provider practices that would unreasonably restrict their ability to access a free and open Internet.

147. AT&T, T-Mobile, and Verizon oppose application of a "commercially reasonable practices" rule to mobile broadband networks. They argue that competition in the mobile broadband market already ensures that service providers have no incentive to discriminate. CTIA argues that applying a commercial reasonableness standard would deter innovation and limit the ability of providers to differentiate themselves in the marketplace because providers would have to factor in the risk of complaints and investigations. Nokia argues that the Commission should ensure that its rules allow a range of service options. Free State recommends that if the Commission adopts a legally enforceable standard, it should establish a presumption that mobile network management practices benefit consumer welfare and that presumption could only be overcome "by actual evidence of anticompetitive conduct."

148. We find that even if the mobile market were sufficiently competitive, competition alone is not sufficient to deter mobile providers from taking actions that would limit Internet openness. As noted above, there have been incidents where mobile providers have acted in a manner inconsistent with open Internet principles and we find that there is a risk that providers will continue to have the incentive to take actions that would favor their own content or services. We also agree with commenters that mobile providers' need for flexibility to manage their network can be accommodated through the reasonable network management exception.

149. In addition, we find that applying the no-unreasonable interference/disadvantage standard to mobile broadband will not affect providers' ability to differentiate themselves in the marketplace. We have crafted the standard we adopt today to prohibit these practices that harm Internet openness while still permitting innovation and experimentation. Nothing in the standard restricts carriers from developing new services or implementing new business models.

c. Rejection of the "Commercially Reasonable" Standard

150. Based on the record before us, we are persuaded that adopting a legal standard prohibiting commercially unreasonable practices is not the most effective or appropriate approach for protecting and promoting an open Internet. Internet openness involves many relationships that are not business-to-business and serves many purposes that are noncommercial. (In the data roaming context, two commercial entities deal directly with one another to negotiate a fee-for-service agreement, and there is a direct business relationship with contractual privity and a purely commercial purpose on both sides of the transaction. Open Internet protections, by contrast, apply to a context where there may be no direct negotiation and no direct agreement between key parties. Moreover, while broadband providers are commercial entities with commercial purposes, many of the parties seeking to route traffic to broadband subscribers are not.) Commenters also expressed concerns that the commercially reasonable standard would involve a multifactor framework that was not focused on the goals of this open Internet proceeding. In addition, some commenters expressed concern that the legal standard would require permission before innovation, thus creating higher barriers to entry and attendant transaction costs. Smaller edge providers expressed concern that they do not have the resources to fight against commercially unreasonable practices, which could result in an unfair playing field before the Commission. Still others argued that the standard would permit paid prioritization, which could disadvantage smaller entities and individuals. Given these concerns, we decline to adopt our proposed rule to prohibit practices that are not commercially reasonable. Instead, as discussed above, we adopt a governing standard that looks to whether consumers or edge providers face

unreasonable interference or unreasonable disadvantages, and makes clear that the standard is not limited to whether a practice is agreeable to commercial parties.

d. Sponsored Data and Usage Allowances

151. While our bright-line rule to treat paid prioritization arrangements as unlawful addresses technical prioritization, the record reflects mixed views about other practices, including usage allowances and sponsored data plans. Sponsored data plans (sometimes called zero-rating) enable broadband providers to exclude edge provider content from end users' usage allowances. On the one hand, evidence in the record suggests that these business models may in some instances provide benefits to consumers, with particular reference to their use in the provision of mobile services. Service providers contend that these business models increase choice and lower costs for consumers. Commenters also assert that sophisticated approaches to pricing also benefit edge providers by helping them distinguish themselves in the marketplace and tailor their services to consumer demands. Commenters assert that such sponsored data arrangements also support continued investment in broadband infrastructure and promote the virtuous cycle, and that there exist spillover benefits from sponsored data practices that should be considered. On the other hand, some commenters strongly oppose sponsored data plans, arguing that "the power to exempt selective services from data caps seriously distorts competition, favors companies with the deepest pockets, and prevents consumers from exercising control over what they are able to access on the Internet," again with specific reference to mobile services. In addition, some commenters argue that sponsored data plans are a harmful form of discrimination. The record also reflects concerns that such arrangements may hamper innovation and monetize artificial scarcity.

152. We are mindful of the concerns raised in the record that sponsored data plans have the potential to distort competition by allowing service providers to pick and choose among content and application providers to feature on different service plans. At the same time, new service offerings, depending on how they are structured, could benefit consumers and competition. Accordingly, we will look at and assess such practices under the no-unreasonable interference/ disadvantage standard, based on the facts of each individual case, and take action as necessary.

153. The record also reflects differing views over some broadband providers' practices with respect to usage allowances (also called "data caps"). Usage allowances place limits on the volume of data downloaded by the end user during a fixed period. Once a cap has been reached, the speed at which the end user can access the Internet may be reduced to a slower speed, or the end user may be charged for excess data. Usage allowances may benefit consumers by offering them more choices over a greater range of service options, and, for mobile broadband networks, such plans are the industry norm today, in part reflecting the different capacity issues on mobile networks. Conversely, some commenters have expressed concern that such practices can potentially be used by broadband providers to disadvantage competing over-the-top providers. Given the unresolved debate concerning the benefits and drawbacks of data allowances and usage-based pricing plans, (Regarding usage-based pricing plans, there is similar disagreement over whether these practices are beneficial or harmful for promoting an open Internet.) we decline to make blanket findings about these practices and will address concerns under the no-unreasonable interference/ disadvantage on a case-by-case basis.

3. Transparency Requirements To Protect and Promote Internet Openness

154. In this section, we adopt enhancements to the existing transparency rule, which covers both content and format of disclosures by providers of broadband Internet access service. As the Commission has previously noted, disclosure requirements are among the least intrusive and most effective regulatory measures at its disposal. We find that the enhanced transparency requirements adopted in the present Order serve the same purposes as those required under the 2010 Open Internet Order: Providing critical information to serve end-user consumers, edge providers of broadband products and services, and the Internet community. The transparency rule, including the enhancements adopted today, also will aid the Commission in enforcing the other open Internet rules and in ensuring that no service provider can evade them through exploitation of narrowly-drawn exceptions for reasonable network management or through evasion of the scope of our rules.

155. In the 2014 Open Internet NPRM, we tentatively concluded that we should enhance the existing transparency rule for end users, edge providers, the Internet community, and the Commission to have the information they need to understand the services they receive and to monitor practices that could undermine the open Internet. The NPRM sought comment on a variety of possible enhancements, including whether to require tailored disclosures for specific constituencies (end users, edge providers, the Internet community); ways to make the content and format of disclosures more accessible and understandable to end users; specific changes to disclosures for network practices that would benefit edge providers; whether there are more effective or more comprehensive ways to measure network performance; whether to require providers to disclose meaningful information regarding source, location, speed, packet loss, and duration of congestion; and whether and how any enhancements should apply to mobile broadband providers in a manner different from their application to fixed broadband providers.

156. Based on the record compiled in response to those proposals, below we set forth targeted, incremental enhancements to the existing transparency rule. We first recap the existing transparency rule, which forms the baseline off of which we build today. Having established that baseline, we describe specific enhancementsincluding refinements and expansions in the required disclosures of commercial terms, performance characteristics, and network practices; adoption of a requirement that broadband providers notify end users directly if their individual use of a network will trigger a network practice, based on their demand prior to a period of congestion, that is likely to have a significant impact on the use of the service. We then address a request to exempt small providers from enhancements to the transparency rule, discuss the relationship of the enhancements to the existing transparency rule, and note the role that we anticipate further guidance from Commission staff will continue to play in applying the transparency rule in practice. Lastly, we adopt a voluntary safe harbor (but not a requirement) for a standalone disclosure format that broadband providers may use in meeting the existing requirement to disclose information that meets the needs of end users.

a. The Existing Transparency Rule

157. The D.C. Circuit in Verizon upheld the transparency rule, which remains in full force, applicable to both fixed and mobile providers. In enhancing this rule, we build off of the solid foundation established by the Open Internet Order. In that Order, the Commission concluded that effective disclosure of broadband providers' network management practices, performance, and commercial terms of service promotes competition, innovation, investment, end-user choice, and broadband adoption. As a result, the Commission adopted a transparency rule requiring both fixed and mobile providers to "publicly disclose accurate information regarding the network management practices, performance, and commercial terms" of their broadband Internet access service. The rule specifies that such disclosures be "sufficient for consumers to make informed choices regarding the use of such services and for content, application, service, and device providers to develop, market, and maintain Internet offerings.'

158. The 2010 Open Internet Order went on to provide guidance on both the information to be disclosed and the method of disclosure. Within each category of required disclosure (network management practices, performance characteristics, and commercial terms), the Open Internet Order described the type of information to be disclosed. For example, under performance characteristics, the Commission specified, among other things, disclosure of "expected and actual access speed and latency" as well as the "impact of specialized services." All disclosures were required to be made "timely and prominently[,] in plain language accessible to current and prospective end users and edge providers, the Commission, and third parties who wish to monitor network management practices for potential violations of open Internet principles."

159. In 2011 and 2014, Commission staff provided guidance on interpreting the transparency rule. For example, in addition to other points, the 2011 guidance issued by the Enforcement Bureau and Office of General Counsel (2011 Advisory Guidance) described the means by which fixed and mobile broadband providers should meet the requirement to disclose actual performance of the broadband Internet access services they offer and to disclose network management practices, performance, characteristics, and commercial terms "at the point of sale." The 2011 Advisory Guidance also

clarified the statement in the Open Internet Order that effective disclosures "will likely include some or all of the" information listed in paragraphs 56 and 98, but also that the list was "not necessarily exhaustive, nor is it a safe harbor," and that "there may be additional information, not included [in paragraphs 56 and 98], that should be disclosed for a particular broadband service to comply with the rule in light of relevant circumstances.' Acknowledging the concern of some providers that "they could be liable for failing to disclose additional types of information that they may not be aware are subject to disclosure," the 2011 Advisory Guidance stated that disclosure of the information described in those paragraphs "will suffice for compliance with the transparency rule at this time.'

160. In an advisory issued in July 2014 (2014 Advisory Guidance), the Enforcement Bureau explained that the transparency rule "prevents a broadband Internet access provider from making assertions about its service that contain errors, are inconsistent with the provider's disclosure statement, or are misleading or deceptive." Accurate disclosures "ensure that consumers-as well as the Commission and the public as a whole—are informed about a broadband Internet access provider's network management practices, performance, and commercial terms." As the 2014 Advisory Guidance recognized, the transparency rule "can achieve its purpose of sufficiently informing consumers only if advertisements and other public statements that broadband Internet access providers make about their services are accurate and consistent with any official disclosures that providers post on their Web sites or make available in stores or over the phone." Thus, "a provider making an inaccurate assertion about its service performance in an advertisement, where the description is most likely to be seen by consumers, could not defend itself against a transparency rule violation by pointing to an 'accurate' official disclosure in some other public place." Allowing such defenses would undermine the core purpose of the transparency rule.

161. Today, we build off of this baseline: The transparency rule requirements established in 2010, and interpreted by the 2011 and 2014 Advisory Guidance. We also take this opportunity to make two clarifications to the existing rule. First, all of the pieces of information described in paragraphs 56 and 98 of the Open Internet Order have been required as

part of the current transparency rule, and we will continue to require the information as part of our enhanced rule. The only exception is the requirement to disclose "typical frequency of congestion," which we no longer require since it is superseded by more precise disclosures already required by the rule, such as actual performance. Second, the requirement that all disclosures made by a broadband provider be accurate includes the need to maintain the accuracy of these disclosures. Thus, whenever there is a material change in a provider's disclosure of commercial terms, network practices, or performance characteristics, the provider has a duty to update the disclosure in a manner that is "timely and prominently disclosed in plain language accessible to current and prospective end users and edge providers, the Commission, and third parties who wish to monitor network management practices for potential violations of open Internet principles." (We decline, however, to adopt a specific timeframe concerning the updating of disclosures following a material change (e.g., 24 hours).) For these purposes, a "material" change is any change that a reasonable consumer or edge provider would consider important to their decisions on their choice of provider, service, or application.

b. Enhancing the Transparency Rule

162. We adopt the tentative conclusion in the 2014 Open Internet *NPRM* to enhance the existing transparency rule in certain respects. We conclude that enhancing the existing transparency rule as described below will better enable end-user consumers to make informed choices about broadband services by providing them with timely information tailored more specifically to their needs, and will similarly provide edge providers with the information necessary to develop new content, applications, services, and devices that promote the virtuous cycle of investment and innovation.

(i) Enhancements to Content of Required Disclosures

163. As noted above, the existing transparency rule requires specific disclosures with respect to network practices, performance characteristics, and commercial terms. As we noted in the 2014 Open Internet NPRM, the Commission has continued to receive numerous complaints from consumers suggesting that broadband providers are not providing information that end

users and edge providers need to receive. We noted that consumers continue to express concern that the speed of their service falls short of advertised speeds, that billed amounts are greater than advertised rates, and that consumers are unable to determine the source of slow or congested service. In addition, we noted that end users are often surprised that broadband providers slow or terminate service based on ''excessive use'' or based on other practices, and that consumers report confusion regarding data thresholds or caps. Further, the need for enhanced transparency is bolstered by the needs of certain user groups who rely on broadband as their primary avenue for communications, such as people with disabilities. These enhancements will also serve edge providers. The record supports our conclusions that more specific and detailed disclosures are necessary to ensure that edge providers can "develop, market, and maintain Internet offerings." Such disclosures will also help the wider Internet community monitor provider practices to ensure compliance with our Open Internet rules and providers' own policies.

164. *Commercial Terms.* The existing transparency rule defines the required disclosure of "commercial terms" to include pricing, privacy policies, and redress options. While we do not take additional action concerning the requirement to disclose privacy policies and redress options, the record demonstrates need for specific required disclosures about price and related terms. In particular, we specify the disclosures of commercial terms for prices, other fees, and data caps and allowances as follows:

• Price—The full monthly service charge. Any promotional rates should be clearly noted as such, specify the duration of the promotional period, and note the full monthly service charge the consumer will incur after the expiration of the promotional period.

• Other Fees—All additional one time and/or recurring fees and/or surcharges the consumer may incur either to initiate, maintain, or discontinue service, including the name, definition, and cost of each additional fee. (The Commission agrees that the magnitude of these fees bears on consumer decision-making when choosing or switching providers. As a result, the provision of explicit information regarding these fees by providers both promotes competition and assists in consumer decision making.) These may include modem rental fees, installation fees, service charges, and early termination fees, among others.

• Data Caps and Allowances—Any data caps or allowances that are a part of the plan the consumer is purchasing, as well as the consequences of exceeding the cap or allowance (*e.g.*, additional charges, loss of service for the remainder of the billing cycle).

To be clear, these disclosures may have been required in certain circumstances under the existing transparency rule in order to provide information "sufficient for consumers to make informed choices." Here, we now require that this information always be disclosed. In addition, per the current rule, disclosures of commercial terms shall also include the provider's privacy policies ("[f]or example, whether network management practices entail inspection of network traffic, and whether traffic information is stored, provided to third parties, or used by the carrier for non-network management purposes'') and redress options ("practices for resolving end-user and edge provider complaints and questions").

165. Performance Characteristics. The existing transparency rule requires broadband providers to disclose accurate information regarding network performance for each broadband service they offer. This category includes a service description ("[a] general description of the service, including the service technology, expected and actual access speed and latency, and the suitability of the service for real-time applications") and the impact of specialized services ("[i]f applicable, what specialized services, if any, are offered to end users, and whether and how any specialized services may affect the last-mile capacity available for, and the performance, or broadband Internet access service").

166. With respect to network performance, we adopt the following enhancements:

• The existing transparency rule requires disclosure of actual network performance. In adopting that requirement, the Commission mentioned speed and latency as two key measures. Today we include packet loss as a necessary part of the network performance disclosure.

• We expect that disclosures to consumers of actual network performance data should be reasonably related to the performance the consumer would likely experience in the geographic area in which the consumer is purchasing service.

• We also expect that network performance will be measured in terms of average performance over a reasonable period of time and during times of peak usage. (We recognize that parties have expressed concern about providing disclosures about network performance on a real-time basis. The enhancements to the transparency rule we adopt today do not include such a requirement. Given that the performance of mobile broadband networks is subject to a greater array of factors than fixed networks, we note that disclosure of a range of speeds may be more appropriate for mobile broadband consumers.)

• We clarify that, for mobile broadband providers, the obligation in the existing transparency rule to disclose network performance information for "each broadband service" refers to separate disclosures for services with each technology (e.g., 3G and 4G). Furthermore, with the exception of small providers, mobile broadband providers today can be expected to have access to reliable actual data on performance of their networks representative of the geographic area in which the consumer is purchasing service—through their own or third-party testing-that would be the source of the disclosure. (Per the 2011 Advisory Guidance, those mobile broadband providers that "lack reasonable access" to reliable information on their network performance metrics may disclose a "Typical Speed Range (TSR)" to meet the requirement to disclose actual performance. In any event, we expect that mobile broadband providers' disclosure of actual performance data will be based on accepted industry practices and principles of statistical validity.) Commission staff also continue to refine the mobile MBA program, which could at the appropriate time be declared a safe harbor for mobile broadband providers. (Participation in the Measuring Broadband America (MBA) program continues to be a safe harbor for fixed broadband providers in meeting the requirement to disclose actual network performance. The 2011 Advisory Guidance further stated that fixed providers that choose not to participate in MBA may measure and disclose performance of their broadband offerings using the MBA's methodology, internal testing, consumer speed data, or other data, including reliable, relevant data from third-party sources. Various software-based broadband performance tests are available as potential tools for end users and companies to estimate actual broadband performanceAs noted above, we anticipate that the measurement methodology used for the MBA project will continue to be refined, which in turn will enhance the

effectiveness of network performance disclosures generally.)

We decline to otherwise codify specific methodologies for measuring the "actual performance" required by the existing transparency rule. We find that, as in 2010, there is benefit in permitting measurement methodologies to evolve and improve over time, with further guidance from Bureaus and Offices—like in 2011—as to acceptable methodologies. (We expect that acceptable methodologies will be grounded in commonly accepted principles of scientific research, good engineering practices, and transparency.) We delegate authority to our Chief Technologist to lead this effort.

167. In addition, the existing rule concerning performance characteristics requires disclosure of the "impact" of specialized services, including "what specialized services, if any, are offered to end users, and "whether and how any specialized services may affect the lastmile capacity available for, and the performance of, broadband Internet access service." As discussed below, today we more properly refer to these services as "non-BIAS data services." Given that the Commission will closely scrutinize offerings of non-BIAS data services and their impact on competition, we clarify that in addition to the requirements of the existing rule concerning what was formerly referred to as "specialized services," disclosure of the impact of non-BIAS data services includes a description of whether the service relies on particular network practices and whether similar functionality is available to applications and services offered over broadband Internet access service.

168. The 2014 Open Internet NPRM tentatively concluded that we should require that broadband providers disclose meaningful information regarding the source, location, timing, speed, packet loss, and duration of network congestion. As discussed above, we continue to require disclosure of actual network speed and latency (as in 2010), and also require disclosure of packet loss. We decline at this time to require disclosure of the source, location, timing, or duration of network congestion, noting that congestion may originate beyond the broadband provider's network and the limitations of a broadband provider's knowledge of some of these performance characteristics. (Short-term congestion occurs whenever instantaneous demand exceeds capacity. Since demand often consists of the aggregation of a large number of users' traffic, it is technologically difficult to determine

the sources of each component of the aggregate traffic) We also asked whether the Commission should expand its transparency efforts to include measurement of other aspects of service. We decline at this time to require disclosure of packet corruption or jitter, noting that commenters expressed concerns regarding the difficulty of defining metrics for such performance characteristics. (Furthermore, corrupted packets may be included in the packet loss performance characteristic.)

169. Network Practices. The existing transparency rule requires disclosure of network practices, including specific disclosures related to congestion management, application-specific behavior, device attachment rules, and security. (Additionally, "mobile broadband providers should follow the guidance the Commission provided to licensees of the upper 700 MHz C Block spectrum regarding compliance with their disclosure obligations, particularly regarding disclosure to third-party application developers and device manufacturers of criteria and approval procedures (to the extent applicable). For example, these disclosures include, to the extent applicable, establishing a transparent and efficient approval process for third parties, as set forth in section 27.16(d)." 2010 Open Internet Order (76 FR 59129-01, 59210, Sept. 23, 2011), 25 FCC Rcd at 17959, para. 98 As discussed above, this information remains part of the transparency rule, with the exception of the requirement to disclose the "typical frequency of congestion.") Today, in recognition of significant consumer concerns presented in the record, we further clarify that disclosure of network practices shall include practices that are applied to traffic associated with a particular user or user group, including any application-agnostic degradation of service to a particular end user. (For example, a broadband Internet access service provider may define user groups based on the service plan to which users are subscribed, the volume of data that users send or receive over a specified time period of time or under specific network conditions, or the location of users.) We also clarify that disclosures of user-based or application-based practices should include the purpose of the practice, which users or data plans may be affected, the triggers that activate the use of the practice, the types of traffic that are subject to the practice, and the practice's likely effects on end users' experiences. While some of these disclosures may have been required in certain circumstances under the existing transparency rule, here we clarify that

this information should always be disclosed. These disclosures with respect to network practices are necessary: for the public and the Commission to know about the existence of network practices that may be evaluated under the rules, for users to understand when and how practices may affect them, and for edge providers to develop Internet offerings.

170. The 2014 Open Internet NPRM asked whether we should require disclosures that permit end users to identify application-specific usage or to distinguish which user or device contributed to which part of the total data usage. We decline at this time to require such disclosures, noting that collection of application-specific usage by a broadband provider may require use of deep packet inspection practices that may pose privacy concerns for consumers.

(ii) Enhancements to the Means of Disclosure

171. The existing transparency rule requires, at a minimum, the prominent display of disclosures on a publicly available Web site and disclosure of relevant information at the point of sale. (Broadband providers must actually disclose information required for consumers to make an "informed choice" regarding the purchase or use of broadband services at the point of sale. It is not sufficient for broadband providers simply to provide a link to their disclosures.) We enhance the rule to require a mechanism for directly notifying end users if their individual use of a network will trigger a network practice, based on their demand prior to a period of congestion, that is likely to have a significant impact on the end user's use of the service. The purpose of such notification is to provide the affected end users with sufficient information and time to consider adjusting their usage to avoid application of the practice.

(iii) Small Businesses

172. The record reflects the concerns of some commenters that enhanced transparency requirements will be particularly burdensome for smaller providers. ACA, for example, suggests that smaller providers be exempted from the provision of such disclosures. ACA states that its member companies are complying with the current transparency requirements, which "strike the right balance between edge provider and consumer needs for pertinent information and the need to provide ISPs with some flexibility in how they disclose pertinent information." We believe that the

transparency enhancements adopted today are modest in nature. For example, we have declined to require certain disclosures proposed in the 2014 Open Internet NPRM such as the source of congestion, packet corruption, and jitter in recognition of commenter concerns with the benefits and difficulty of making these particular disclosures. We also do not require "real-time" disclosures. These proposed disclosures appear to form the bulk of ACA's concerns. Nevertheless, we take seriously the concerns that ACA raises and those of smaller broadband providers generally.

173. Out of an abundance of caution, we grant a temporary exemption for these providers, with the potential for that exemption to become permanent. It is unclear, however, how best to delineate the boundaries of this exception. Clearly, it should include those providers likely to be most disproportionately affected by new disclosure requirements. ACA "acknowledge[s] that Congress and the Commission have defined 'small' in various ways." One metric to which ACA points is the approach that the Commission used in its 2013 Rural Call Completion Order, which excepted providers with 100,000 or fewer subscriber lines, aggregated across all affiliates, from certain recordkeeping, retention, and reporting rules. We adopt this definition for purposes of the temporary exemption that we adopt today. Accordingly, we hereby adopt a temporary exemption from the enhancements to the transparency rule for those providers of broadband Internet access service (whether fixed or mobile) with 100.000 or fewer broadband subscribers as per their most recent Form 477, aggregated over all the providers' affiliates.

174. Yet we believe that both the appropriateness of the exemption and the threshold require further deliberation. Accordingly, the exemption we adopt is only temporary. We delegate to the Consumer & Governmental Affairs Bureau (CGB) the authority to determine whether to maintain the exemption and, if so, the appropriate threshold for it. We direct CGB to seek comment on the question and to adopt an Order announcing whether it is maintaining an exemption and at what level by no later than December 15, 2015. Until such time, notwithstanding any approval received by the Office of Management & Budget for the enhancements adopted today, such enhancements will not apply to providers of broadband Internet access service with 100,000 or fewer subscribers.

175. To be clear, all providers of broadband Internet access service, including small providers, remain subject to the existing transparency rule adopted in 2010. The temporary exemption adopted today, and any permanent exemption adopted by CGB, applies only to the enhanced disclosures described above. As ACA states in its request for an exemption for small providers, "[i]rrespective of which definition of small that is chosen by the Commission, exempt ISPs would still be required to comply with the transparency requirements contained in section 8.3 of the Commission's rules todav.'

(iv) Safe Harbor for Form of Disclosure to Consumers

176. The existing transparency rule requires disclosures sufficient both to enable "consumers to make informed choices regarding use of [broadband] services" and "content, application, service, and device providers to develop, market, and maintain Internet offerings." As in 2010, a central purpose of the transparency rule remains to provide information useful to both constituencies. As we noted in the 2014 Open Internet NPRM, we are concerned that disclosures are not consistently provided in a manner that adequately satisfies the divergent informational needs of all affected parties. For example, disclosures at times are illdefined; do not consistently measure service offerings, making comparisons difficult; or are not easily found on provider Web sites. In the 2014 Open Internet NPRM, we therefore proposed requiring separate disclosure statements to meet both the basic informational needs of consumers and the more technical needs of edge providers.

177. The record reflects concerns, however, as to a requirement to offer tailored disclosures. For example, ACA states that disclosures tailored to edge providers "would require small ISPs, who manage their own networks and may only have a handful of network operators, engineers, and head end staff to make onerous expenditures of both personnel hours and financial resources." Bright House "question[s] the feasibility of creating disclosures tailored to the varied and potentially unique needs of the hundreds of such providers, particularly with no reciprocal obligation." Similarly, Tech Freedom and the International Center for Law and Economics assert that "requiring ISPs to tailor their disclosures to the various parties the ISPs deal with (*i.e.*, consumers, edge providers, the Internet community, and the FCC) greatly increases the burden of complying with these disclosures, especially as such disclosures must be periodically updated to reflect changes to ISPs' network management practices." In light of these concerns, we decline to require separate disclosures at this time.

178. In declining to mandate separate disclosures, however, we do not intend to diminish the existing requirement for disclosure of information sufficient for both end users and edge providers. The Commission has not established that a single disclosure would always satisfy the rule; rather, it merely stated broadband providers "may be able" to satisfy the transparency rule through a single disclosure. We are especially concerned that in some cases a single disclosure statement may be too detailed and technical to meet the needs of consumers, rather than a separate consumer-focused disclosure. As noted in the 2014 Open Internet NPRM, both academic research and the Commission's experience with consumer issues have demonstrated that the manner in which providers display information to consumers can have as much impact on consumer decisions as the information itself. A stand-alone format has proven effective in conveying useful information in other contexts. We also note that the OIAC and OTI have proposed the use of a label to disclose the most important information to users of broadband service. In addition, the United Kingdom's largest Internet service providers agreed to produce a comparable table of traffic management information called a Key Facts Indicator.

179. Therefore, we are establishing a voluntary safe harbor for the format and nature of the required disclosure to consumers. To take advantage of the safe harbor, a broadband provider must provide a consumer-focused, standalone disclosure. We decline, however, to mandate the exact format for such disclosures at this time. (We note that although we have sought comment on what format would be most effective, the record is lacking on specific details as to how such a disclosure should be formatted.) Rather, we seek the advice of our Consumer Advisory Committee, which is composed of both industry and consumer interests, including those representing people with disabilities. (The Committee's purpose is to make recommendations to the Commission regarding consumer issues within Commission's jurisdiction and to facilitate the participation of consumers (including people with disabilities and underserved populations, such as Native Americans and persons living in

rural areas) in proceedings before the Commission.) We find that the Committee's experience with consumer disclosure issues (For example, the Committee has studied the value of standardized disclosures and their contents.) makes it an ideal body to recommend a disclosure format that should be clear and easy to readsimilar to a nutrition label—to allow consumers to easily compare the services of different providers. We believe the CAC is uniquely able to recommend a disclosure format that both anticipates and addresses provider compliance burdens while ensuring the utility of the disclosures for consumers.

180. We direct the CAC to formulate and submit to the Commission a proposed disclosure format, based on input from a broad range of stakeholders, within six months of the time that its new membership is reconstituted, but, in any event, no later than October 31, 2015. The disclosure format must be accessible to persons with disabilities. We expect that the CAC will consider whether to propose the same or different formats for fixed and mobile broadband providers. In addition, we expect that the CAC will consider whether and how a standard format for mobile broadband providers will allow providers to continue to differentiate their services competitively, as well as how mobile broadband providers can effectively disclose commercial terms to consumers regarding myriad plans in a manner that is not administratively burdensome. The Commission delegates authority to the Wireline Competition Bureau, Wireless Telecommunications Bureau, and **Consumer & Governmental Affairs** Bureau to issue a Public Notice announcing whether the proposed format or formats meet its expectations for the safe harbor for making consumerfacing disclosures. If the format or formats do not meet such expectations, the Bureaus may ask the CAC to consider changes and submit a revised proposal for the Bureaus' review within 90 days of the Bureaus' request.

181. Broadband providers that voluntarily adopt this format will be presumed to be in compliance with the requirement to make transparency disclosures in a format that meets the needs of consumers. Providers that choose instead to maintain their own format—for example, a unitary disclosure intended both for consumers and edge providers—will bear the burden, if challenged, of explaining how a single disclosure statement meets the needs of both consumers and edge providers. To be clear, use of the consumer disclosure format is a safe harbor with respect to the format of the required disclosure to consumers. A broadband provider meeting the safe harbor could still be found to be in violation of the rule, for example, if the content of that disclosure (*e.g.*, prices) is misleading or inaccurate, or the provider makes misleading or inaccurate statements in another context, such as advertisements or other statements to consumers. Moreover, broadband providers using the safe harbor should continue to provide the more detailed disclosure statement for the benefit of edge providers.

c. Enforcement and Relationship to the Existing Transparency Rule

182. Despite these enhancements to the existing transparency rule, we clarify that we are being specific in order to provide additional guidance. The transparency rule has always required broadband providers to disclose information "sufficient for consumers to make informed choices" (Even where a particular category of information discussed above was not specified in the 2010 Open Internet Order that does not mean that disclosure of that information has not consistently been required under the transparency rule. If such information is necessary for a consumer to make an "informed choice" regarding the purchase or use of broadband service, disclosure of that information is a fundamental requirement of the transparency rule.) and that test could, in particular circumstances, include the enhancements that we expressly adopt today. We also reiterate that under both the existing transparency rule and the enhancements adopted in this Order, all disclosures that broadband providers make about their network practices, performance, and commercial terms of broadband services must be accurate and not misleading.

183. In the 2014 Open Internet NPRM we also requested comment on how the Commission could best enforce the transparency rule. In particular, we noted that a key objective of the transparency rule is to enable the Commission to collect information necessary to access, report, and enforce the open Internet rules. For example, we sought comment on whether to require broadband providers to certify that they are in compliance with the required disclosures and/or submit reports containing descriptions of current disclosure practices, particularly if the existing flexible approach is amended to require more specific disclosures. Some commenters caution against measures that are unnecessary, susceptible to abuse, or burdensome. Others express

support for stronger or more efficient enforcement mechanisms. At this time we decline to require certification by broadband providers. Should evidence be provided, however, that certification is necessary, we will revisit this issue at a later date.

184. We also remind providers that if their disclosure statements fail to meet the requirements established in 2010 and enhanced today, they may be subject to investigation and forfeiture. The Enforcement Bureau will closely scrutinize failure by providers to meet their obligations in fulfilling the transparency rule.

d. Role of Further Advisory Guidance

185. The 2011 and 2014 Advisorv *Guidance* documents illustrate the role of further guidance from Commission staff in interpreting and applying the general requirements of the transparency rule. We anticipate that as technology, the marketplace, and the needs of consumers, edge providers, and other stakeholders evolve, further such guidance may be appropriate concerning the transparency rule, including with respect to the enhancements adopted today. The most immediate example concerns ongoing improvements and evolutions in the methodologies for measuring broadband providers' actual performance, as discussed in further detail above. We also point out that broadband providers are able to seek advisory opinions from the Enforcement Bureau concerning any of the open Internet regulations, including the transparency rule.

D. Scope of the Rules

186. The open Internet rules we adopt today apply to fixed and mobile broadband Internet access service. We make clear, however, that while the definition of broadband Internet access service encompasses arrangements for the exchange of Internet traffic, the open Internet rules we adopt today do not apply to that portion of the broadband Internet access service.

1. Broadband Internet Access Service

187. As discussed below, we continue to define "broadband Internet access service" (BIAS) as:

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.

188. "Broadband Internet access service" continues to include 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. "Broadband Internet access service" encompasses 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. (The Commission has consistently determined that resellers of telecommunications services are telecommunications carriers, even if they do not own any facilities. We note that the rules apply not only to facilities-based providers of broadband service but also to resellers of that service. In applying these obligations to resellers, we recognize, as the Commission has in other contexts, that consumers will expect the protections and benefits afforded by providers' compliance with the rules, regardless of whether the consumer purchase service from a facilities-based provider or a reseller. We note that a reseller's obligation under the rules is independent from the obligation of the facilities-based provider that supplies the underlying service to the reseller, though the extent of compliance by the underlying facilities-based provider will be a factor in assessing compliance by the reseller.) "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. It also includes services that use smartphones or mobilenetwork-enabled tablets as the primary endpoints for connection to the Internet, (We note that "public safety services," as defined in section 337 of the Act, are excluded from the definition of mobile broadband Internet access service.) as well as mobile satellite broadband services. (We provide these definitions of "fixed" and "mobile" for illustrative purposes. In contrast to the Commission's 2010 Open Internet

Order, here we are applying the same regulations to both fixed and mobile broadband Internet access services.)

189. We continue to define "mass market" as "a service marketed and sold on a standardized basis to residential customers, small businesses, and other end-user customers such as schools and libraries." To be clear, "mass market" includes broadband Internet access services purchased with support of the E-rate and Rural Healthcare programs, as well as any broadband Internet access service offered using networks supported by the Connect America Fund (CAF). (In the 2010 Open Internet Order, the Commission found that "mass market" included broadband Internet access services purchased with support of the E-rate program. Since that time, the Commission has extended universal service support for broadband services through the Lifeline and Rural Health Care programs. Thus, for the same reasons the Commission defined mass market services to include BIAS purchased with the support of the E-rate program in 2010, we now find that mass market also includes BIAS purchased with the support of Lifeline and Rural Health Care programs.) To the extent that institutions of higher learning purchase mass market services, those institutions would be included within the scope of the schools and libraries portion of our definition. The term 'mass market'' does not include enterprise service offerings, which are typically offered to larger organizations through customized or individuallynegotiated arrangements, or special access services.

190. We adopt our tentative conclusion in the 2014 Open Internet NPRM that 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 (to the extent those services are separate from broadband Internet access service). The Commission has historically distinguished these services from "mass market" services and, as explained in the 2014 Open Internet NPRM, they "do not provide the capability to receive data from all or substantially all Internet endpoints." We do not disturb that finding here. Likewise, when a user employs, for example, a wireless router or a Wi-Fi hotspot to create a personal Wi-Fi network that is not intentionally offered for the benefit of others, he or she is not providing a broadband Internet access service under our definition.

191. We again decline to apply the open Internet rules to premises

operators-such as coffee shops, bookstores, airlines, private end-user networks (e.g. libraries and universities), and other businesses that acquire broadband Internet access service from a broadband provider to enable patrons to access the Internet from their respective establishments-to the extent they may be offering broadband Internet access service as we define it today. (While we decline to apply open Internet rules to premises operators to the extent they may offer broadband Internet access service, that decision does not affect other obligations that may apply to premises operators under the Act.) We find, as we did in 2010, that a premises operator that purchases BIAS is an end user and that these services "are typically offered by the premise operator as an ancillary benefit to patrons." Further, applying the open Internet rules to the provision of broadband service by premises operators would have a dampening effect on these entities' ability and incentive to offer these services. As such, we do not apply the open Internet rules adopted today to premises operators. (We reiterate the guidance in the 2010 Open Internet Order that although not bound by our rules, we encourage premises operators to disclose relevant restrictions on broadband service they make available to their patrons.) The record evinces no significant disagreement with this analysis. (We note, however, that this exception does not affect other obligations that a premise operator may have independent of our open Internet rules.)

192. Our definition of broadband Internet access service includes services "by wire or radio," which encompasses mobile broadband service. Thus, our definition of broadband Internet access service also extends to the same services provided by mobile providers. As discussed above, the record demonstrates the pressing need to apply open Internet rules to fixed and mobile broadband services alike, and changes in the mobile marketplace no longer counsel in favor of treating mobile differently under the rules. Thus, we apply the open Internet rules adopted today to both fixed and mobile networks. (Although we adopt the same rules for both fixed and mobile services, we recognize that with respect to the reasonable network management exception, the rule may apply differently to fixed and mobile broadband providers.)

193. As we discuss more fully below, broadband Internet access service encompasses the exchange of Internet traffic by an edge provider or an

intermediary with the broadband provider's network. Below, we find that broadband Internet access service is a telecommunications service, subject to sections 201, 202, and 208 (along with key enforcement provisions). (We note that broadband Internet access services are also subject to sections 222, 224, 225, 254, and 255.) As a result, the Commission will be available to hear disputes regarding arrangements for the exchange of traffic with a broadband Internet access provider raised under sections 201 and 202 on a case-by-case basis: an appropriate vehicle for enforcement where disputes are primarily over commercial terms and that involve some very large corporations, including companies like transit providers and CDNs, that act on behalf of smaller edge providers. However, for reasons discussed more fully below, we exclude this portion of broadband Internet access serviceinterconnection with a broadband Internet access service provider's network-from application of our open Internet rules. We note that this exclusion also extends to interconnection with CDNs.

2. Internet Traffic Exchange

194. In the 2010 Open Internet Order, the Commission applied its open Internet rules "only as far as the limits of a broadband provider's control over the transmission of data to or from its broadband customers," and excluded the exchange of traffic between networks from the scope of the rules. In the 2014 Open Internet NPRM, the Commission tentatively concluded that it should maintain this approach, but explicitly sought comment on suggestions that the Commission should expand the scope of the open Internet rules to cover issues related to Internet traffic exchange. (As a general matter, Internet traffic exchange involves the exchange of IP traffic between networks. An Internet traffic exchange arrangement determines which networks exchange traffic and the destinations to which those networks will deliver that traffic. In aggregate, Internet traffic exchange arrangements allow an end user of the Internet to interact with other end users on other Internet networks, including content or services that make themselves available by having a public IP address, similar to how the global public switched telephone network consists of networks that route calls based on telephone numbers. When we adopted the 2014 Open Internet NPRM, the Chairman issued a separate, written statement suggesting that "the question of interconnection ('peering') between the

consumer's network provider and the various networks that deliver to that ISP . . . is a different matter that is better addressed separately." 2014 Open Internet NPRM. 29 FCC Rcd at 5647. While this statement reflected the Notice's tentative conclusion concerning Internet traffic exchange, it in no way detracts from the fact that the Notice also sought comment on "whether we should change our conclusion," whether to adopt proposals to "expand the scope of the open Internet rules to cover issues related to traffic exchange," and how to "ensure that a broadband provider would not be able to evade our open Internet rules by engaging in traffic exchange practices that would be outside the scope of the rules as proposed.")

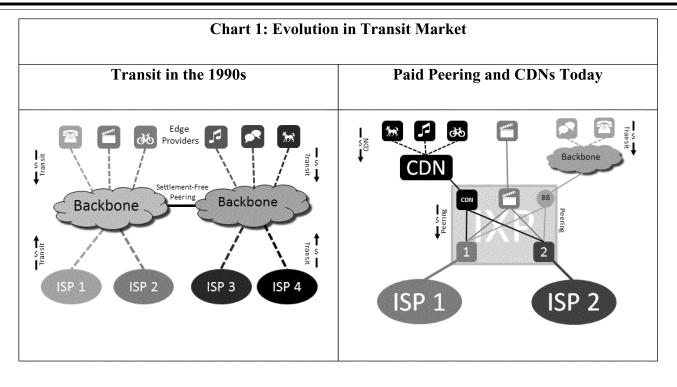
195. As discussed below, we classify fixed and mobile broadband Internet access service as telecommunications services. The definition for broadband Internet access service includes the exchange of Internet traffic by an edge provider or an intermediary with the broadband provider's network. We note that anticompetitive and discriminatory practices in this portion of broadband Internet access service can have a deleterious effect on the open Internet, and therefore retain targeted authority to protect against such practices through sections 201, 202, and 208 of the Act (and related enforcement provisions), but will forbear from a majority of the other provisions of the Act. Thus, we conclude that, at this time, application of the no-unreasonable interference/ disadvantage standard and the prohibitions on blocking, throttling, and paid prioritization to the Internet traffic exchange arrangements is not warranted.

196. Trends in Internet Traffic Exchange. Internet traffic exchange is typically based on commercial negotiations. Changes in consumer behavior, traffic volume, and traffic composition have resulted in new business models for interconnection. Since broadband Internet access service providers cannot, on their own, connect to every end point on the Internet in order to provide full Internet access to their customers, they historically paid third-party backbone service providers for transit. Backbone service providers interconnected upstream until traffic reached Tier 1 backbone service providers, which peered with each other and thereby provided their customer networks with access to the full Internet. In this hierarchical arrangement of networks, broadband Internet access providers negotiated with backbone service providers; broadband Internet access providers generally did not negotiate with edge providers to gain access to content. However, in recent years, new business models of Internet traffic exchange have emerged, premised on changes in traffic flows and in broadband Internet access provider networks. A number of factors drive these trends in Internet traffic exchange.

197. Čritically, the growth of online streaming video services has sparked further evolution of the Internet. Content providers have come to rely on the services of commercial and private CDNs, which cache content close to end users, providing increased quality of service and avoiding transit costs. While CDNs rely on transit to feed the array of CDN cache servers, they deliver traffic to broadband Internet access service providers via transit service or by entering into peering arrangements, directly interconnecting with broadband Internet access service providers.

198. In addition, several large broadband Internet access service providers, such as AT&T, Comcast, Time Warner Cable, and Verizon, have built or purchased their own backbones, giving them the ability to directly interconnect with other networks and edge providers and thereby lowering and eliminating payments to third-party transit providers. These interconnection arrangements are "peering," involving the exchange of traffic only between the two networks and their customers, rather than paid transit, which provides access to the full Internet over a single interconnection. Peering gives the participants greater control over their traffic and any issues arising with the traffic exchange are limited to those parties, and not other parties over other interconnection links. Historically, broadband Internet access service providers paid for transit and therefore had an incentive to agree to settlementfree peering with a CDN to reduce transit costs; however, where large broadband Internet access service providers have their own national backbones and have settlement-free peering with other backbones, they may no longer have an incentive to agree to settlement-free peering with CDNs in order to avoid transit costs. As shown below in Chart 1, the evolution from reliance on transit to peering arrangements also means an evolution from a traffic exchange arrangement that provides access to the full Internet to a traffic exchange arrangement that only provides for the exchange of traffic from a specific network provider and its customers.

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199. Recent Disputes. Recently, Internet traffic exchange disputes have reportedly involved not de-peering, as was more frequently the case in the last decade, but rather degraded experiences caused by congested ports between providers. In addition, these disputes have evolved from conflicts that may last a few days, to disputes that have been sustained for well over a year, and have gone from disputes between backbone service networks, to disputes between providers of broadband Internet access service and transit service providers, CDNs, or edge providers. The typical dispute has involved, on one side, a large broadband provider, and on the other side, a commercial transit provider (such as Cogent or Level 3) and/or a large CDN. Multiple parties point out, however, that interconnection problems can harm more than just the parties in a dispute. When links are congested and capacity is not augmented, the networks—and applications, large and small, running over the congested links into and out of those networks—experience degraded quality of service due to reduced throughput, increased packet loss, increased delay, and increased jitter. At the end of the day, consumers bear the harm when they experience degraded access to the applications and services of their choosing due to a dispute between a large broadband provider and an interconnecting party. Parties also assert that these disputes raise concerns about public safety and network reliability. To address these growing concerns, a number of parties have

called for extending the rules proposed in the *2014 Open Internet NPRM* to Internet traffic exchange practices.

200. The record reflects competing narratives. Some edge and transit providers assert that large broadband Internet access service providers are creating artificial congestion by refusing to upgrade interconnection capacity at their network entrance points for settlement-free peers or CDNs, thus forcing edge providers and CDNs to agree to paid peering arrangements. These parties suggest that paid arrangements resulting from artificially congested interconnection ports at the broadband Internet access service provider network edge could create the same consumer harms as paid arrangements in the last-mile, and lead to paid prioritization, fast lanes, degradation of consumer connections, and ultimately, stifling of innovation by edge providers. Further, edge providers argue that they are covering the costs of carrying this traffic through the network, bringing it to the gateway of the Internet access service, unlike in the past where both parties covered their own costs to reach the Tier 1 backbones where traffic would then be exchanged on a settlement-free basis. Edge and transit providers argue that the costs of adding interconnection capacity or directly connecting with edge providers are de minimis. Further, they assert that traffic ratios "are arbitrarily set and enforced and are not reflective of how [broadband providers] sell broadband connections and how consumers use them." Thus, these edge and transit

providers assert that a focus on only the last-mile portion of the Internet traffic path will fail to adequately constrain the potential for anticompetitive behavior on the part of broadband Internet access service providers that serve as gatekeepers to the edge providers, transit providers, and CDNs seeking to deliver Internet traffic to the broadband providers' end users.

201. In contrast, large broadband Internet access service providers assert that edge providers such as Netflix are imposing a cost on broadband Internet access service providers who must constantly upgrade infrastructure to keep up with the demand. Large broadband Internet access service providers explain that when an edge provider sends extremely large volumes of traffic to a broadband Internet access service provider—*e.g.*, through a CDN or a third-party transit service providerthe broadband provider must invest in additional interconnection capacity (e.g., new routers or ports on existing routers) and middle-mile transport capacity in order to accommodate that traffic, exclusive of "last-mile" costs from the broadband Internet access provider's central offices, head ends, or cell sites to end-user locations. Commenters assert that if the broadband Internet access service provider absorbs these interconnection and transport costs, all of the broadband provider's subscribers will see their bills rise. They argue that this is unfair to subscribers who do not use the services, like Netflix, that are driving the need for additional capacity. Broadband Internet

access service providers explain that settlement-free peering fundamentally is a barter arrangement in which each side receives something of value. These parties contend that if the other party is only sending traffic, it is not contributing something of value to the broadband Internet access service provider.

202. Mechanism to Resolve Traffic Exchange Disputes. As discussed, Internet traffic exchange agreements have historically been and will continue to be commercially negotiated. We do not believe that it is appropriate or necessary to subject arrangements for Internet traffic exchange (which are subsumed within broadband Internet access service) to the rules we adopt today. We conclude that it would be premature to adopt prescriptive rules to address any problems that have arisen or may arise. (We decline to adopt these and similar types of proposals for the same reasons we decline to apply the open Internet rules to traffic exchange.) It is also premature to draw policy conclusions concerning new paid Internet traffic exchange arrangements between broadband Internet access service providers and edge providers, CDNs, or backbone services. (For instance, Akamai expresses concern that adoption of rules governing interconnection could be used as a justification by some broadband providers to refuse direct interconnection to CDNs and other content providers generally, on the theory that connecting with any CDN necessitates connecting with all CDNs, regardless of technical feasibility. We do not intend such a result by our decision today to assert authority over interconnection.) While the substantial experience the Commission has had over the last decade with "last-mile" conduct gives us the understanding necessary to craft specific rules based on assessments of potential harms, we lack that background in practices addressing Internet traffic exchange. For this reason, we adopt a case-by-case approach, which will provide the Commission with greater experience. Thus, we will continue to monitor traffic exchange and developments in this market.

203. At this time, we believe that a case-by-case approach is appropriate regarding Internet traffic exchange arrangements between broadband Internet access service providers and edge providers or intermediaries—an area that historically has functioned without significant Commission oversight. (We note, however, that the Commission has looked at traffic exchange in the context of mergers and,

sometimes imposed conditions on traffic exchange.) Given the constantly evolving market for Internet traffic exchange, we conclude that at this time it would be difficult to predict what new arrangements will arise to serve consumers' and edge providers' needs going forward, as usage patterns, content offerings, and capacity requirements continue to evolve. Thus, we will rely on the regulatory backstop prohibiting common carriers from engaging in unjust and unreasonable practices. Our "light touch" approach does not directly regulate interconnection practices. Of course, this regulatory backstop is not a substitute for robust competition. The Commission's regulatory and enforcement oversight, including over common carriers, is complementary to vigorous antitrust enforcement. Indeed, mobile voice services have long been subject to Title II's just and reasonable standard and both the Commission and the Antitrust Division of the Department of Justice have repeatedly reviewed mergers in the wireless industry. Thus, it will remain essential for the Commission, as well as the Department of Justice, to continue to carefully monitor, review, and where appropriate, take action against any anti-competitive mergers, acquisitions, agreements or conduct, including where broadband Internet access services are concerned.

204. Broadband Internet access service involves the exchange of traffic between a last-mile broadband provider and connecting networks. (We disagree with commenters who argue that arrangements for Internet traffic exchange are private carriage arrangements, and thus not subject to Title II. As we explain below in today's Declaratory Ruling, Internet traffic exchange is a component of broadband Internet access service, which meets the definition of "telecommunications service.") 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. As a telecommunications service, broadband Internet access service implicitly includes an assertion that the broadband provider will make just and reasonable efforts to transmit and deliver its customers' traffic to and from "all or substantially all Internet endpoints" under sections 201 and 202 of the Act. In any event, BIAS provider practices with respect to such arrangements are plainly "for and in connection with" the BIAS service. Thus, disputes involving a provider of

broadband Internet access service regarding Internet traffic exchange arrangements that interfere with the delivery of a broadband Internet access service end user's traffic are subject to our authority under Title II of the Act. (We note that the Commission has forborne from application of many of the requirements of Title II to broadband Internet access service.)

205. We conclude that our actions regarding Internet traffic exchange arrangements are reasonable based on the record before us, which demonstrates that broadband Internet access providers have the ability to use terms of interconnection to disadvantage edge providers and that consumers' ability to respond to unjust or unreasonable broadband provider practices are limited by switching costs. These findings are limited to the broadband Internet access services we address today. (We observe that should a complaint arise regarding BIAS provider Internet traffic exchange practices, practices by edge providers (and their intermediaries) would be considered as part of the Commission's evaluation as to whether BIAS provider practices were "just and reasonable" under the Act.) When Internet traffic exchange breaks down-regardless of the cause—it risks preventing consumers from reaching the services and applications of their choosing, disrupting the virtuous cycle. We recognize the importance of timely review in the midst of commercial disputes. The Commission will be available to hear disputes raised under sections 201 and 202 on a case-by-case basis. We believe this is an appropriate vehicle for enforcement where disputes are primarily between sophisticated entities over commercial terms and that include companies, like transit providers and CDNs, that act on behalf of smaller edge providers. We also observe that section 706 provides the Commission with an additional, complementary source of authority to ensure that Internet traffic exchange practices do not harm the open Internet. As explained above, we have decided not to adopt specific regulations that would detail the practices that would constitute circumvention of the open Internet regulations we adopt today. Instead, and in a manner similar to our treatment of non-BIAS services, we will continue to monitor Internet traffic exchange arrangements and have the authority to intervene to ensure that they are not harming or threatening to harm the open nature of the Internet.

206. The record also reflects a concern that our decision to adopt this regulatory backstop violates the

Administrative Procedure Act. (Verizon claims that "in light of the Commission's past statements on interconnection, to suddenly regulate [interconnection] agreements for the first time in a final rule in this proceeding would violate the notice and comment requirements of the Administrative Procedure Act" and that even issuing a Further Notice of Proposed Rulemaking would not allow the Commission to impose Title II regulations on interconnection services. The dissenting statements likewise assert that the 2014 Open Internet NPRM did not provide notice of the possibility that the Commission would assert authority over interconnection.) We disagree. To be clear, consistent with the NPRM's proposal, we are not applying the open Internet rules we adopt today to Internet traffic exchange. Rather, certain regulatory consequences flow from the Commission's classification of BIAS, including the traffic exchange component, as falling within the "telecommunications services" definition in the Act. In all events, the 2014 Open Internet NPRM provided clear notice about the possibility of expanding the scope of the open Internet rules to cover issues related to traffic exchange. (Section 553 provides that "[g]eneral notice of proposed rulemaking shall be published in the Federal Register," and that "[a]fter notice required by this section, the agency shall give interested persons an opportunity to participate in the rule making" through submission of comments. 5 U.S.C. 553(b), (c). The Commission published the NPRM in the Federal Register at 79 FR 37448, July 1, 2014. It also made clear that the Commission was considering whether to reclassify retail broadband services. In addition, the 2014 Open Internet NPRM asked: "How can we ensure that a broadband provider would not be able to evade our open Internet rules by engaging in traffic exchange practices that would be outside the scope of the rules as proposed?" As discussed above, our assertion of authority over Internet traffic exchange practices addresses that question by providing us with the necessary case-by-case enforcement tools to identify practices that may constitute such evasion and address them. Further, to the extent that any doubts remain about whether the 2014 Open Internet NPRM provided sufficient notice, the approach adopted today is also a logical outgrowth of the original proposal included in the 2014 Open Internet NPRM. The numerous submissions in the record at every stage of the proceeding seeking to influence

the Commission in its decision to adopt policies regulating Internet traffic exchange illustrate that the Commission not only gave interested parties adequate notice of the possibility of a rule, but that parties considered Commission action on that proposal a real possibility.

3. Non-BIAS Data Services

207. In the 2014 Open Internet NPRM, the Commission tentatively concluded that it should not apply its conductbased rules to services offered by broadband providers that share capacity with broadband Internet access service over providers' last-mile facilities, while closely monitoring the development of these services to ensure that broadband providers are not circumventing the open Internet rules. After reviewing the record, we believe the best approach is to adopt this tentative conclusion to permit broadband providers to offer these types of services while continuing to closely monitor their development and use. While the 2010 Open Internet Order and the 2014 Open Internet NPRM used the term "specialized services" to refer to these types of services, the term "non-BIAS data services" is a more accurate description for this class of services. While the services discussed below are not broadband Internet access service, and thus the rules we adopt do not apply to these services, we emphasize that we will act decisively in the event that a broadband provider attempts to evade open Internet protections (e.g., by claiming that a service that is the equivalent of Internet access is a non-BIAS data service not subject to the rules we adopt today).

208. We provide the following examples of services and characteristics of those services that, at this time, likely fit within the category of services that are not subject to our conduct-based rules. As indicated in the 2010 Open Internet Order, some broadband providers' existing facilities-based VoIP and Internet Protocol-video offerings would be considered non-BIAS data services under our rules. Further, the 2010 Open Internet Order also noted that connectivity bundled with ereaders, heart monitors, or energy consumption sensors would also be considered other data services to the extent these services are provided by broadband providers over last-mile capacity shared with broadband Internet access service. Additional examples of non-BIAS data services may include limited-purpose devices such as automobile telematics, and services that provide schools with curriculumapproved applications and content.

209. These services may generally share the following characteristics identified by the Open Internet Advisory Committee. First, these services are not used to reach large parts of the Internet. Second, these services are not a generic platform—but rather a specific "application level" service. And third, these services use some form of network management to isolate the capacity used by these services from that used by broadband Internet access services.

210. We note, however, that non-BIAS data services may still be subject to enforcement action. Similar to the Commission's approach in 2010, if the Commission determines that a particular service is "providing a functional equivalent of broadband Internet access service, or . . . is [being] used to evade the protections set forth in these rules," we will take appropriate enforcement action. Further, if the Commission determines that these types of service offerings are undermining investment, innovation, competition, and end-user benefits, we will similarly take appropriate action. We are especially concerned that over-the-top services offered over the Internet are not impeded in their ability to compete with other data services. (Further, we anticipate that consumers of competing over-the-top services will not be disadvantaged in their ability to access 911 service.)

211. The record overwhelmingly supports our decision to continue treating non-BIAS data services differently than broadband Internet access service under the open Internet rules. This approach will continue to drive additional investment in broadband networks and provide end users with valued services without otherwise constraining innovation. Further, as noted by numerous commenters, since other data services were permitted in the 2010 Open Internet Order, we have seen little resulting evidence of broadband providers using these services to undermine the 2010 rules.

212. Nevertheless, non-BIAS data services still could be used to evade the open Internet rules. Due to these concerns, we will continue to monitor the market for non-BIAS data services to ensure that these services are not causing or threatening to cause harm to the open nature of the Internet. Since the 2010 Open Internet Order, broadband Internet access providers have been required to disclose the impact of non-BIAS data services on the performance of and the capacity available for broadband Internet access services. As discussed in detail above, we will continue to monitor the existence and effects of non-BIAS data services under the broadband providers' transparency obligations.

213. We disagree with commenters who argue that the Commission should adopt a more-detailed definition for non-BIAS data services to safeguard against any such circumvention of the rules. Several commenters provided definitions of what they believe should constitute non-BIAS data services. Others, however, expressed concerns that a formal definition of non-BIAS data services risks potentially limiting future innovation and investment, ultimately negatively impacting consumer welfare. We share these concerns and thus decline to further define what constitutes "non-BIAS data services" or adopt additional policies specific to such services at this time. Again, however, we will closely monitor the development and use of non-BIAS data services and have authority to intervene if these services are utilized in a manner that harms the open Internet.

4. Reasonable Network Management

214. The 2014 Open Internet NPRM proposed to retain a reasonable network management exception to the conductbased open Internet rules, following the approach adopted in the 2010 Open Internet Order that permitted exceptions for "reasonable network management" practices to the no-blocking and no unreasonable discrimination rules. The 2014 Open Internet NPRM also tentatively concluded that the Commission should retain the definition of reasonable network management adopted as part of the 2010 rules that "[a] network management practice is reasonable if it is appropriate and tailored to achieving a legitimate network management purpose, taking into account the particular network architecture and technology of the broadband Internet access service."

215. The record broadly supports maintaining an exception for reasonable network management. We agree that a network management exception to the no-blocking rule, the no-throttling rule, and the no-unreasonable interference/ disadvantage standard is necessary for broadband providers to optimize overall network performance and maintain a consistent quality experience for consumers while carrying a variety of traffic over their networks. (As discussed above, the transparency rule does not include an exception for reasonable network management. We clarify, however, that the transparency rule "does not require public disclosure of competitively sensitive information or information that would compromise

network security or undermine the efficacy of reasonable network management practices.") Therefore, the no-blocking rule, the no-throttling rule, and the no-unreasonable interference/ disadvantage standard will be subject to reasonable network management for both fixed and mobile providers of broadband Internet access service. In addition to retaining the exception, we retain the definition of reasonable network management with slight modifications:

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.

216. For a practice to even be considered under this exception, a broadband Internet access service provider must first show that the practice is primarily motivated by a technical network management justification rather than other business justifications. If a practice is primarily motivated by such an other justification, such as a practice that permits different levels of network access for similarly situated users based solely on the particular plan to which the user has subscribed, then that practice will not be considered under this exception. The term "particular network architecture and technology" refers to the differences across broadband access platforms of any kind, including cable, fiber, DSL, satellite, unlicensed Wi-Fi, fixed wireless, and mobile wireless.

217. As noted above, reasonable network management is an exception to the no-blocking rule, no-throttling rule, and no-unreasonable interference/ disadvantage standard, but not to the rule against paid prioritization. (Paid prioritization would be evaluated under the standards set forth in section II.C.1.c supra) This is because unlike conduct implicating the no-blocking, nothrottling, or no-unreasonable interference/disadvantage standard, paid prioritization is not a network management practice because it does not primarily have a technical network management purpose. (For purposes of the open Internet rules, prioritization of affiliated content, applications, or services is also considered a form of paid prioritization.) When considering whether a practice violates the noblocking rule, no-throttling rule, or nounreasonable interference/disadvantage standard, the Commission may first evaluate whether a practice falls within

the exception for reasonable network management.

218. Evaluating Network Management Practices. The 2014 Open Internet NPRM proposed that the Commission adopt the same approach for determining the scope of network management practices considered to be reasonable as adopted in the 2010 Open Internet Order. (The Commission decided to determine the scope of reasonable network management on a case-by-case basis in the Open Internet Order and we maintain those same factors today.) We recognize the need to ensure that the reasonable network management exception will not be used to circumvent the open Internet rules while still allowing broadband providers flexibility to experiment and innovate as they reasonably manage their networks. We therefore elect to maintain a case-by-case approach. The case-by-case review also allows sufficient flexibility to address mobilespecific management practices because, by the terms of our rule, a determination of whether a network management practice is reasonable takes into account the particular network architecture and technology. We also note that our transparency rule requires disclosures that provide an important mechanism for monitoring whether providers are inappropriately exploiting the exception for reasonable network management.

219. To provide greater clarity and further inform the Commission's caseby-case analysis, we offer the following guidance regarding legitimate network management purposes. We also note that, similar to the 2010 reasonable network management exception, broadband providers may request a declaratory ruling or an advisory opinion from the Commission before deploying a network management practice, but are not required to do so.

220. As with the network management exception in the 2010 Open Internet Order, broadband providers may implement network management practices that are primarily used for, and tailored to, ensuring network security and integrity, including by addressing traffic that is harmful to the network, such as traffic that constitutes a denial-of-service attack on specific network infrastructure elements. Likewise, broadband providers may also implement network management practices that are primarily used for, and tailored to, addressing traffic that is unwanted by end users. Further, we reiterate the guidance of the 2010 Open Internet Order that network management practices that alleviate congestion without regard to the source, destination, content, application, or

service are also more likely to be considered reasonable network management practices in the context of this exception. (As in the no throttling rule and the no unreasonable interference or unreasonable disadvantage standard, we include classes of content, applications, services, or devices.) In evaluating congestion management practices, a subset of network management practices, we will also consider whether the practice is triggered only during times of congestion and whether it is based on a user's demand during the period of congestion.

221. We also recognize that some network management practices may have a legitimate network management purpose, but also may be exploited by a broadband provider. We maintain the guidance underlying the 2010 Open Internet Order's case-by-case analysis that a network management practice is more likely to be found reasonable if it is transparent, and either allows the end user to control it or is applicationagnostic.

222. As in 2010, we decline to adopt a more detailed definition of reasonable network management. For example, one proposal suggests that the Commission limit the circumstances in which network management techniques can be used so they would only be reasonable if they were used temporarily, for exceptional circumstances, and have a proportionate impact to solve a targeted problem. We acknowledge the advantages a more detailed definition of network management can have on longterm network investment and transparency, but at this point, there is not a need to place such proscriptive limits on broadband providers. (While some commenters note that there have not been any major technological changes in how broadband providers manage traffic since 2010, others indicate that broadband providers have acquired additional techniques that allow them to manage traffic in realtime.) Furthermore, a more detailed definition of reasonable network management risks quickly becoming outdated as technology evolves. Caseby-case analysis will allow the Commission to use the conduct-based rules adopted today to take action against practices that are known to harm consumers without interfering with broadband providers' beneficial network management practices. (Beneficial practices include protecting their Internet access services against malicious content or offering a service limited to offering "family friendly" materials to end users who desire only such content.)

223. We believe that the reasonable network management exception provides both fixed and mobile broadband providers sufficient flexibility to manage their networks. We recognize, consistent with the consensus in the record, that the additional challenges involved in mobile broadband network management mean that mobile broadband providers may have a greater need to apply network management practices, including mobile-specific network management practices, and to do so more often to balance supply and demand while accommodating mobility. As the Commission observed in 2010, mobile network management practices must address dynamic conditions that fixed, wired networks typically do not, such as the changing location of users as well as other factors affecting signal quality. The ability to address these dynamic conditions in mobile network management is especially important given capacity constraints many mobile broadband providers face. Moreover, notwithstanding any limitations on mobile network management practices necessary to protect the open Internet, we anticipate that mobile broadband providers will continue to be able to use a multitude of tools to manage their networks, including an increased number of network management tools available in 4G LTE networks.

224. We note in a similar vein that providers relying on unlicensed Wi-Fi networks have specific network management needs. For example, these providers can "face spectrum constraints and congestion issues that can pose particular networkmanagement challenges" and also "must accept and manage interference from other users in the unlicensed bands." Again, the Commission will take into account when and how network management measures are applied as well as the particular network architecture and technology of the broadband Internet access service in question, in determining if a network management practice is reasonable. For these reasons, we reject the argument that rules with exceptions only for reasonable network management practices would "tie the hands of operators and make it more challenging to meet consumers' needs" or that "the mere threat of *post hoc* regulatory review . . . would disrupt and could chill optimal network management practices." In recognizing the unique challenges, network architecture, and network management of mobile broadband networks (and others, such as unlicensed Wi-Fi networks), we

conclude that the reasonable network management exception addresses this concern and strikes an appropriate balance between the need for flexibility and ensuring the Commission has the tools necessary to maintain Internet openness.

E. Enforcement of the Open Internet Rules

1. Background

225. Timely and effective enforcement of the rules we adopt in this Order is crucial to preserving an open Internet, enhancing competition and innovation, and providing clear guidance to consumers and other stakeholders. As has been the case since we adopted our original open Internet rules in 2010, we anticipate that many disputes that will arise can and should be resolved by the parties without Commission involvement. We encourage parties to resolve disputes through informal discussions and private negotiations whenever possible. To the extent disputes are not resolved, the Commission will continue to provide backstop mechanisms to address them. We also will proactively monitor compliance and take strong enforcement action against parties who violate the open Internet rules.

226. In the 2010 Open Internet Order, the Commission established a two-tiered framework for enforcing open Internet rules. The Commission allowed parties to file informal complaints pursuant to section 1.41 of our rules and promulgated new procedures to govern formal complaints alleging violations of the open Internet rules. This framework was not affected by the D.C. Circuit's decision in Verizon. It therefore remains in effect and will apply to complaints regarding the rules we adopt in this Order. Informal complaints provide end users, edge providers, and others with a simple and efficient vehicle for bringing potential open Internet violations to the attention of the Commission. The formal complaint rules permit any person to file a complaint with the Commission alleging an open Internet rule violation and to participate in an adjudicatory proceeding to resolve the complaint. In addition to these mechanisms for resolving open Internet complaints, the Commission continuously monitors press reports and other public information, which may lead the Enforcement Bureau to initiate an investigation of potential open Internet rule violations.

227. In the 2014 Open Internet NPRM, the Commission sought comment on the efficiency and functionality of the complaint processes adopted in the

2010 Open Internet Order and on mechanisms we should consider to improve enforcement and dispute resolution. We tentatively concluded that our open Internet rules should include at least three fundamental elements: (1) Legal certainty, so that broadband providers, edge providers, and end users can plan their activities based on clear Commission guidance; (2) flexibility to consider the totality of the facts in an environment of dynamic innovation; and (3) effective access to dispute resolution. We affirm the importance of these principles below and discuss several enhancements to our existing open Internet complaint rules to advance them. In addition, we adopt changes to our complaint processes to ensure that they are accessible and user-friendly to consumers, small businesses, and other interested parties, as well as changes to ensure that that our review of complaints is inclusive and informed by groups with relevant technical or other expertise.

2. Designing an Effective Enforcement Process

a. Legal Certainty

228. We sought comment in the 2014 Open Internet NPRM on ways to design an effective enforcement process that provides legal certainty and predictability to the marketplace. In addition to our current complaint resolution framework, we requested input on what other forms of guidance would be helpful. We solicited feedback on whether the Commission should: (1) Establish an advisory opinion process, akin to "business review letters" issued by the Department of Justice (DOJ), and/ or non-binding staff opinions, through which parties could ask the Commission for a statement of its current enforcement intentions with respect to certain practices under the new rules; and (2) publish enforcement advisories that provide additional insight into the application of the rules. Many commenters recognized the benefits of clear rules and greater predictability regarding open Internet protections.

(i) Advisory Opinions

229. We conclude that use of advisory opinions similar to those issued by DOJ's Antitrust Division is in the public interest and would advance the Commission's goal of providing legal certainty. (We decline to adopt nonbinding staff opinions in light of our decision to establish an advisory opinion process similar to the DOJ Antitrust Division's business review letter approach, as well as existing

voluntary mediation processes to resolve open Internet disputes that are available through the Enforcement Bureau's Market Disputes and Resolutions Division.) Although the Commission historically has not used advisory opinions to promote compliance with our rules, we conclude that they have the potential to serve as useful tools to provide clarity, guidance, and predictability concerning the open Internet rules. (Parties also have the option to file a petition for declaratory ruling under section 1.2 of the Commission's rules, 47 CFR 1.2. In contrast to declaratory rulings, advisory opinions may only relate to prospective conduct, and the Enforcement Bureau will not seek comment on advisory opinions via public notice.) Advisory opinions will enable companies to seek guidance on the propriety of certain open Internet practices before implementing them, enabling them to be proactive about compliance and avoid enforcement actions later. The Commission may use advisory opinions to explain how it will evaluate certain types of behavior and the factors that will be considered in determining whether open Internet violations have occurred. Because these opinions will be publicly available, we believe that they will reduce the number of disputes by providing guidance to the industry.

230. In this Order, we adopt rules promulgating basic requirements for obtaining advisory opinions, as well as limitations on their issuance. Any entity that is subject to the Commission's jurisdiction may request an advisory opinion regarding its own proposed conduct that may implicate the rules we adopt in this Order, the rules that remain in effect from the 2010 Open Internet Order, or any other rules or policies related to the open Internet that may be adopted in the future.

231. Requests for advisory opinions may be filed via the Commission's Web site or with the Office of the Secretary and must be copied to the Commission staff specified in the rules. We delegate authority to issue advisory opinions to the Enforcement Bureau, which will coordinate with other Bureaus and Offices on the issuance of opinions. The Enforcement Bureau will have discretion to choose whether it will respond to the request. If the Bureau declines to respond to a request, it will inform the requesting party in writing. As a general matter, the Bureau will be more likely to respond to requests where the proposed conduct involves a substantial question of fact or law and there is no clear Commission or court precedent, or the subject matter of the request and consequent publication of

Commission advice is of significant public interest. In addition, the Bureau will decline to respond to requests if the same conduct is the subject of a current government investigation or proceeding, including any ongoing litigation or open rulemaking.

232. Requests for advisory opinions must relate to *prospective* or proposed conduct that the requesting party intends to pursue. The Enforcement Bureau will not respond to hypothetical questions or inquiries about proposals that are mere possibilities. The Bureau also will not respond to requests for opinions that relate to ongoing or prior conduct, and the Bureau may initiate an enforcement investigation to determine whether such conduct violates the open Internet rules.

233. Requests for advisory opinions should include all material information sufficient for Commission staff to make a determination on the proposed conduct; however, staff will have discretion to ask parties requesting opinions, as well as other parties that may have information relevant to the request or that may be impacted by the proposed conduct, for additional information that the staff deems necessary to respond to the request. Because advisory opinions will rely on full and truthful disclosures by the requesting entities, requesters must certify that factual representations made to the Enforcement Bureau are truthful and accurate, and that they have not intentionally omitted any material information from the request. Advisory opinions will expressly state that they rely on the representations made by the requesting party, and that they are premised on the specific facts and representations in the request and any supplemental submissions.

234. Although the Enforcement Bureau will attempt to respond to requests for advisory opinions expeditiously, we decline to establish any firm deadlines to rule on them or issue response letters. The Commission appreciates that if the advisory opinion process is not timely, it will be less valuable to interested parties. However, response times will likely vary based on numerous factors, including the nature and complexity of the issues, the magnitude and sufficiency of the request and the supporting information, and the time it takes for the requester to respond to staff requests for additional information. An advisory opinion will provide the Enforcement Bureau's conclusion regarding whether or not the proposed conduct will comply with the open Internet rules. The Bureau will have discretion to indicate in an advisory opinion that it does not intend

to take enforcement action based on the facts, representations, and warranties made by the requesting party. The requesting party may rely on the opinion only to the extent that the request fully and accurately contains all the material facts and representations necessary for the opinion and the situation conforms to the situation described in the request for opinion. The Enforcement Bureau will not bring an enforcement action against a requesting party with respect to any action taken in good faith reliance upon an advisory opinion if all of the relevant facts were fully, completely, and accurately presented to the Bureau, and where such action was promptly discontinued upon notification of rescission or revocation of the Commission's or the Bureau's approval.

235. Advisory opinions will be issued without prejudice to the Enforcement Bureau's ability to reconsider the questions involved, or to rescind or revoke the opinion. Similarly, because advisory opinions issued at the staff level are not formally approved by the full Commission, they will be issued without prejudice to the Commission's right to later rescind the findings in the opinion. Because advisory opinions will address proposed future conduct, they necessarily will not concern any case or controversy that is ripe for appeal.

236. The Enforcement Bureau will make advisory opinions available to the public. In order to provide meaningful guidance to other stakeholders, the Bureau will also publish the initial request for guidance and any associated materials. Thus, the rules that we adopt establish procedures for entities soliciting advisory opinions to request confidential treatment of certain information.

237. Many commenters support the use of advisory opinions as a means for the Commission to provide authoritative guidance to parties about the application of open Internet rules and the Commission's enforcement intentions. In addition, some commenters suggest that review letters and staff opinions should be voluntary. We agree that solicitation of advisory opinions should be purely voluntary, and that failure to seek such an opinion will not be used as evidence that an entity's practices are inconsistent with our rules.

238. The Wireless Internet Service Providers Association (WISPA) opposes the adoption of an advisory opinion process "because it assumes an inherent uncertainty in the rules and creates a 'mother may I' regime—essentially creating a system where a broadband provider must ask the Commission for permission when making business decisions." According to WISPA, "[t]his system would increase regulatory uncertainty and stifle broadband providers from innovating new technologies or business methods. It also would be expensive for a small provider to implement, requiring legal and professional expertise."

239. We find that WISPA's concerns are misguided. Because requests for advisory opinions will be entirely voluntary, we disagree with the contention that their use would force broadband providers to seek permission before implementing new policies or technologies and thereby stifle innovation. In addition, we agree with other commenters that advisory opinions would provide more, not less, certainty regarding the legality of proposed business practices.

(ii) Enforcement Advisories

240. We conclude that the periodic publication of enforcement advisories will advance the Commission's goal of promoting legal certainty regarding the open Internet rules. In the 2014 Open *Internet NPRM,* we inquired whether the Commission should issue guidance in the form of enforcement advisories that provide insight into the application of Commission rules. Enforcement advisories are a tool that the Commission has used in numerous contexts, including the current open Internet rules. We asked whether continued use of such advisories would be helpful where issues of potential general application come to the Commission's attention, and whether these advisories should be considered binding policy of the Commission or merely a recitation of staff views.

241. Numerous commenters maintain that the Commission should continue to use enforcement advisories to offer clarity, guidance, and predictability concerning the open Internet rules. We agree. Enforcement advisories do not create new policies, but rather are recitations and reminders of existing legal standards and the Commission's current enforcement intentions. (We disagree with the contention that public notice and comment should be a prerequisite for the Commission to issue an enforcement advisory. The Commission uses its rulemaking procedures when we are adopting rule changes that require notice and comment. Conversely, enforcement advisories are used to remind parties of existing legal standards.) We see no need to deviate from our current practice of issuing such advisories to periodically remind parties about legal

standards regarding the open Internet rules.

b. Flexibility

(i) Means of Enforcement and General Enforcement Mechanisms

242. We will preserve the Commission's existing avenues for enforcement of open Internet rules self-initiated investigation by the Enforcement Bureau, informal complaints, and formal complaints. Commenters agree with the value of retaining these three main mechanisms for commencing enforcement of potential open Internet violations, as this combination ensures multiple entry points to the Commission's processes and gives both complainants and the Commission enforcement flexibility.

243. In addition, the Commission will continue to honor requests for informal complaints to remain anonymous, and will also continue to maintain flexible channels for reporting suspected violations, like confidential calls to the Enforcement Bureau. Although some commenters raise concerns about anonymous complaint filings, others stress the importance of having the option to request anonymity when filing an informal complaint. We note, however, that complainants who are not anonymous frequently have better success getting their concerns addressed because the service provider can then troubleshoot their specific concerns.

244. We also adopt our tentative conclusion in the 2014 Open Internet NPRM that enforcement of the transparency rule should proceed under the same dispute mechanisms that apply to other rules contained in this Order. We believe that providing both complainants and the Commission with flexibility to address violations of the transparency rule will continue to be important and that the best means to ensure compliance with both the transparency rule and the other rules we adopt today is to apply a uniform and consistent enforcement approach.

245. Finally, we conclude that violations of the open Internet rules will be subject to any and all penalties authorized under the Communications Act and rules, (Section 706 was enacted as part of the 1996 Telecommunications Act, and it is therefore subject to any and all penalties under the Act and our rules. See Verizon, 740 F.3d at 650 ("Congress expressly directed that the 1996 Act . . . be inserted into the Communications Act of 1934.") (quoting AT&T Corp. v. Iowa Utilities Board, 525 U.S. 366, 377 (1999)).) including but not limited to admonishments, citations, notices of violation, notices of apparent

liability, monetary forfeitures and refunds, cease and desist orders, revocations, and referrals for criminal prosecution. Moreover, negotiated Consent Decrees can contain damages, restitution, compliance requirements, attorneys' fees, declaratory relief, and equitable remedies like injunctions, equitable rescissions, reformations, and specific performance.

(ii) Case-by-Case Analysis

246. The 2014 Open Internet NPRM emphasized that the process for providing and promoting an open Internet must be flexible enough to accommodate the ongoing evolution of Internet technology. We therefore tentatively concluded that the Commission should continue to use a case-by-case approach, taking into account the totality of the circumstances, in considering alleged violations of the open Internet rules.

247. We affirm our proposal to continue to analyze open Internet complaints on a case-by-case basis. (We reject the suggestion that the Commission promulgate additional rules of conduct because it is unrealistic to expect that in this varied and rapidly evolving technological environment the agency will be able to anticipate the specific conduct that will give rise to future disputes.) We agree with commenters that flexible rules, administered through case-by-case analysis, will enable us to pursue meaningful enforcement, consider consumers' individual concerns, and account for rapidly changing technology.

(iii) Fact-Finding Processes

248. In the 2014 Open Internet NPRM, we sought comment about how to most effectively structure a flexible fact finding process in analyzing open Internet complaints. We asked what level of evidence should be required in order to bring a claim. With regard to formal complaint proceedings, we also asked what showing should be required for the burden of production to shift from the party bringing the claim to the defendant, as well as whether parties could seek expedited treatment.

249. Informal Complaints. Our current rules permitting the filing of informal complaints include a simple and straightforward evidentiary standard. Under section 1.41 of our rules, "[r]equests should set forth clearly and concisely the facts relied upon, the relief sought, the statutory and/or regulatory provisions (if any) pursuant to which the request is filed and under which relief is sought, and the interest of the person submitting the request." Although our rules do not establish any specific pleading requirements for informal complaints, parties filing them should attempt to provide the Commission with sufficient information and specific facts that, if proven true, would constitute a violation of the open Internet rules.

250. We find that our existing informal complaint rule offers an accessible and effective mechanism for parties—including consumers and small businesses with limited resources—to report possible noncompliance with our open Internet rules without being subject to burdensome evidentiary or pleading requirements. We conclude that there is no basis in the record for modifying the existing standard and decline to do so.

251. Formal Complaints. Our current open Internet formal complaint rules provide broad flexibility to adapt to the myriad potential factual situations that might arise. For example, as noted in the 2010 Open Internet Order, some cases can be resolved based on the pleadings if the complaint and answer contain sufficient factual material to decide the case. A simple case could thus be adjudicated in an efficient, streamlined manner. For more complex matters, the existing rules give the Commission discretion to require other procedures, including discovery, briefing, a status conference, oral argument, an evidentiary hearing, or referral to an administrative law judge (ALJ). Similarly, the rules provide the Commission discretion to grant temporary relief where appropriate.

252. In addition, our open Internet formal complaint process already contemplates burden shifting. (As we noted in the 2010 Open Internet Order, our current processes permit the Commission to shift the burden of production where appropriate.) Generally, complainants bear the burden of proof and must demonstrate by a preponderance of the evidence that an alleged violation has occurred. A complainant must plead with specificity the basis of its claim and provide facts and documentation, when possible, to establish a *prima facie* rule violation. Defendants must answer each claim with particularity and furnish facts, supported by documentation or affidavit, demonstrating that the challenged practice complies with our rules. Defendants do not have the option of merely pointing out that the complainant has failed to meet his or her burden; they must show that they are in compliance with the rules. The complainant then has an opportunity to respond to the defendant's submission. We retain our authority to shift the

burden of production when, for example, the evidence necessary to assess the alleged unlawful practice is predominately in the possession of the broadband provider. If a complaining party believes the burden of production should shift, it should explain why in the complaint. Complainants also must clearly state the relief requested. We conclude that we should retain our existing open Internet procedural rules and that all formal complaints that relate to open Internet disputes, including Internet traffic exchange disputes, will be subject to those rules. Although comparable to the section 208 formal complaint rules, the open Internet rules are less burdensome on complainants, who in this context are likely to be consumers or small edge providers with limited resources. (The section 208 rules, for example, require complainants to submit information designations, proposed findings of fact and conclusions of law, and affidavits demonstrating the basis for complainant's belief for unsupported allegations and why complainant could not ascertain facts from any source. See, e.g., 47 CFR 1.721(a) (5), (6), (10). The open Internet formal complaint rules do not contain similar requirements.) Moreover, as described above, the open Internet procedural rules allow the Commission broader flexibility in tailoring proceedings to fit particular cases. (For example, under the open Internet rules, the Commission may order an evidentiary hearing before an administrative law judge (ALJ) or Commission staff. See 47 CFR 8.14(e)(1), (g). The section 208 rules contain no such provision. In addition, unlike the section 208 rules, the open Internet rules do not contain numerical limits on discovery requests. *Compare id.* section 8.14(f) with id. section 1.729(a).)

253. Several commenters stress the need for speedy resolution of complaints, given the rapid pace of Internet commerce and the potential consumer harms and market chilling effects deriving from slow resolution. While we share these concerns, we decline to adopt fixed, short deadlines for resolving formal complaints but pledge to move expeditiously. As noted in the 2010 Open Internet Order, the Commission may shorten deadlines or otherwise revise procedures to expedite the adjudication of complaints. Additionally, the Commission will determine, on the basis of the evidence before it, whether temporary relief should be afforded any party pending final resolution of a complaint and, if so, the nature of any such temporary relief. (The Supreme Court has affirmed

the Commission's authority to impose interim injunctive relief pursuant to section 4(i) of the Act.) As noted above, some open Internet cases may be straightforward and suitable for decision in a 60 to 90 day timeframe. Other cases may be more factually and technologically complex, requiring more time for the parties to pursue discovery and build an adequate record, and sufficient time for the Commission to make a reasoned decision. Therefore, we find that the existing process—allowing parties to request expedited treatment best fits the needs of potential open Internet formal complaints.

c. Effective Access To Dispute Resolution

254. In this section, we adopt the proposal from the 2014 Open Internet NPRM to establish an ombudsperson to assist consumers, businesses, and organizations with open Internet complaints and questions by ensuring these parties have effective access to the Commission's processes that protect their interests. The record filed supports our conclusion that these parties would benefit from having an ombudsperson as a point of contact within the Commission for questions and complaints.

255. Comments in support of the establishment of an ombudsperson clearly demonstrate the range of groups a dedicated ombudsperson can serve. For example, the American Association of People with Disabilities expressed particular interest in the potential of the ombudsperson to monitor concerns regarding accessibility and the open Internet. In addition, the comments of Higher Education Libraries asked that libraries be amongst the groups served by the ombudsperson and those of the Alaska Rural Coalition expressed interest in the ombudsperson also being accessible to small carriers with concerns. In contrast, some commenters expressed concerns about the creation of a dedicated ombudsperson. However, as described below, the ombudsperson will work as a point of contact and a source of assistance as needed, not as an advocate or as an officer who must be approached for approval, addressing many of these concerns.

256. The Open Internet Ombudsperson will serve as a point of contact to provide assistance to individuals and organizations with questions or complaints regarding the open Internet to ensure that small and often unrepresented groups reach the appropriate bureaus and offices to address specific issues of concern. For example, the ombudsperson will be able to provide initial assistance with the

Commission's dispute resolution procedures by directing such parties to the appropriate templates for formal and informal complaints. We expect the ombudsperson will assist interested parties in less direct but equally important ways. These could include conducting trend analysis of open Internet complaints and, more broadly, market conditions, that could be summarized in reports to the Commission regarding how the market is functioning for various stakeholders. The ombudsperson may investigate and bring attention to open Internet concerns, and refer matters to the Enforcement Bureau for potential further investigation. The ombudsperson will be housed in the **Consumer & Governmental Affairs** Bureau, which will remain the initial informal complaint intake point, and will coordinate with other bureaus and offices, as appropriate, to facilitate review of inquiries and complaints regarding broadband services.

3. Complaint Processes and Forms of Dispute Resolution

a. Complaint Filing Procedures

257. In the 2014 Open Internet NPRM, we sought comment on how open Internet complaints should be received, processed, and enforced. We asked if there were ways to improve access to our existing informal and formal complaint processes, especially for consumers, small businesses, and other entities with limited resources and knowledge of how our complaint processes work. We also asked whether the current enforcement and dispute resolution tools at the Commission's disposal are sufficient for resolving violations of open Internet rules.

258. Informal Complaints. First, we will implement processes to make it easier to lodge informal open Internet complaints, including a new, more intuitive online complaint interface. The Commission recently launched a new Consumer Help Center, which provides a user-friendly, streamlined means to access educational materials on consumer issues and to file complaints. Consumers who seek to file an open Internet complaint should visit the Consumer Help Center portal and click the Internet icon for the materials or the online intake system for complaints. The complaint intake system is designed to guide the consumer efficiently through the questions that need to be answered in order to file a complaint. The Consumer Help Center will make available aggregate data about complaints received, including those pertaining to

open Internet issues. Some data is currently available, with additional and more granular data to be provided over time. We believe these efforts will improve access to the Commission's open Internet complaint processes.

259. Formal Complaints. With respect to formal complaints, we amend the Commission's Part 8 open Internet rules to require electronic filing of all pleadings in open Internet formal complaint proceedings. Currently, parties to such proceedings must file hard copies of pleadings with the Office of the Secretary. This process is timeconsuming for the parties and makes it difficult for the public to track case developments. Although members of the public may obtain copies of the pleadings from the Commission's Reference Information Center, there is no way to search for or view pleadings electronically. Today's actions modernize and reform these existing procedures. (The rule changes described in this section do not apply to open Internet *informal* complaints. Consumers will continue to have the ability to file informal complaints electronically with the Consumer & Governmental Affairs Bureau. The form for filing an informal complaint is available at https://

consumercomplaints.fcc.gov/hc/en-us.) 260. In 2011, the Commission released a Report and Order revising part 1 and part 0 of its rules. One aspect of the Part 1 Order was a requirement that docketing and electronic filing begin to be utilized in proceedings involving "[n]ewly filed section 208 formal common carrier complaints and newly filed section 224 pole attachment complaints before the Enforcement Bureau." On November 12, 2014, the Commission released an Order that amended its procedural rules governing formal complaints under section 208 and pole attachment complaints under section 224 to require electronic filing. We established within ECFS a "Submit a Non-Docketed Filing" module where all such complaints must be filed because staff must review a complaint for conformance with the Commission's rules before the matter can receive its own unique ECFS proceeding number.

261. We now extend those rule changes to open Internet formal complaints. (We hereby amend the caption for the ECFS docket to "section 208 and 224 and Open Internet Complaint Inbox, Restricted Proceedings." We also amend rule 8.16, which governs confidentiality of proprietary information, to conform to the changes we made regarding confidentiality in the section 208 and section 224 complaint rules. See infra Appendix (detailing revisions to 47 CFR 8.16).) When filing such a complaint, as of the effective date of this Order, the complainant will be required to select "Open Internet Complaint: Restricted Proceeding" from the "Submit a Non-Docketed Filing" module in ECFS. The filing must include the complaint, as well as all attachments to the complaint. (All electronic filings must be machinereadable, and files containing text must be formatted to allow electronic searching and/or copying (e.g., in Microsoft Word or PDF format). Nontext filings (e.g., Microsoft Excel) must be submitted in native format. Be certain that filings submitted in .pdf or comparable format are not locked or password-protected. If those restrictions are present (e.g., a document is locked), the ECFS system may reject the filing, and a party will need to resubmit its document within the filing deadline. The Commission will consider granting waivers to this electronic filing requirement only in exceptional circumstances.) When using ECFS to initiate new proceedings, a complainant no longer will have to file its complaint with the Office of the Secretary unless the complaint includes confidential information.

262. Enforcement Bureau staff will review new open Internet formal complaints for conformance with procedural rules (including fee payment). As of the effective date of this Order, complainants no longer will submit a hard copy of the complaint with the fee payment as described in rule 1.1106. Instead, complainants must first transmit the complaint filing fee to the designated payment center and then file the complaint electronically using ECFS. (Complainants may transmit the complaint filing fee via check, wire transfer, or electronically using the Commission's Fee Filer System (Fee Filer).)

263. Assuming a complaint satisfies this initial procedural review, Enforcement Bureau staff then will assign an EB file number to the complaint (EB Identification Number), give the complaint its own case-specific ECFS proceeding number, and enter both the EB Identification Number and ECFS proceeding number into ECFS. At that time, Enforcement Bureau staff will post a Notice of Complaint Letter in the case-specific ECFS proceeding and transmit the letter (and the complaint) via email to the defendant. On the other hand, if a filed complaint does not comply with the Commission's procedural rules, Enforcement Bureau staff will serve a rejection letter on the complainant and post the rejection letter and related correspondence in ECFS.

Importantly, the rejection letter will not preclude the complainant from curing the procedural infirmities and refiling the complaint.

264. As of the effective date of this Order, all pleadings, attachments, exhibits, and other documents in open Internet formal complaint proceedings must be filed using ECFS, both in cases where the complaint was initially filed in ECFS and in pending cases filed under the old rules. With respect to complaints filed prior to the effective date of this Order, Enforcement Bureau staff will assign an individual ECFS proceeding number to each existing proceeding and notify existing parties by email of this new ECFS number. This ECFS proceeding number will be in addition to the previously-assigned number. The first step in using ECFS is to input the individual case's ECFS proceeding number or EB Identification Number. The new rules allow parties to serve post-complaint submissions on opposing parties via email without following up by regular U.S. mail. Parties must provide hard copies of submissions to staff in the Market Disputes Resolution Division of the Enforcement Bureau upon request.

265. Consistent with existing Commission electronic filing guidelines, any party asserting that materials filed in an open Internet formal complaint proceeding are proprietary must file with the Commission, using ECFS, a public version of the materials with any proprietary information redacted. The party also must file with the Secretary's Office an unredacted hard copy version that contains the proprietary information and clearly marks each page, or portion thereof, using bolded brackets, highlighting, or other distinct markings that identify the sections of the filing for which a proprietary designation is claimed. (Filers must ensure that proprietary information has been properly redacted and thus is not viewable. If a filer inadvertently discloses proprietary information, the Commission will not be responsible for that disclosure.) Each page of the redacted and unredacted versions must be clearly identified as the "Public Version" or the "Confidential Version," respectively. Both versions must be served on the same day.

b. Alternative Dispute Resolution

266. The Commission sought comment on various modes of alternative dispute resolution for resolving open Internet disputes. Currently, parties with disputes before the Commission are free to voluntarily engage in mediation, which is offered by the Market Disputes Resolution Division (MDRD) at no charge to the parties. This process has worked well and has led to the effective resolution of numerous complaints. We will take steps to improve awareness of this approach. In the 2014 Open Internet NPRM, we asked whether other approaches, such as arbitration, should be considered, in order to ensure access to dispute resolution by smaller edge providers and other entities without resources to engage in the Commission's formal complaint process.

267. We decline to adopt arbitration procedures or to mandate arbitration for parties to open Internet complaint proceedings. Under the rules adopted today, parties are still free to engage in mediation and outside arbitration to settle their open Internet disputes, but alternative dispute resolution will not be required. (As a general matter, the Commission lacks the ability to subdelegate its authority over these disputes to a private entity, like a thirdparty arbitrator, see U.S. Telecom Ass'n v. FCC, 359 F.3d 554, 566 (D.C. Cir. 2004) ("[W]hile federal agency officials may subdelegate their decision-making authority to subordinates absent evidence of contrary congressional intent, they may not subdelegate to outside entities-private or sovereignabsent affirmative evidence of authority to do so"), and "may not require any person to consent to arbitration as a condition of entering into a contract or obtaining a benefit." As noted in the 2014 Open Internet NPRM, however, mandatory third-party arbitration may be allowed so long as it is subject to *de* novo review by the Commission.) Commenters generally do not favor arbitration in this context and recommend that the Commission not adopt it as the default method for resolving complaints. Commenters suggest that mandatory arbitration, in particular, may more frequently benefit the party with more resources and more understanding of dispute procedure, and therefore should not be adopted. We agree with these concerns and conclude that adoption of arbitration rules is not necessary or appropriate in this context.

c. Multistakeholder Processes and Technical Advisory Groups

268. In the 2014 Open Internet NPRM, the Commission sought comment on whether enforcement of open Internet rules—including resolution of open Internet disputes—could be supported by multistakeholder processes that enable the development of independent standards to guide the Commission in compliance determinations. The Commission also asked whether it

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should incorporate the expertise of technical advisory groups into these determinations.

269. We conclude that incorporating groups with technical expertise into our consideration of formal complaints has the potential to inform the Commission's judgment and improve our understanding of complex and rapidly evolving technical issues. By requiring electronic filing of all pleadings in open Internet formal complaint proceedings, we will enable interested parties to more easily track developments in the proceedings and participate as appropriate. Although formal complaint proceedings are generally restricted for purposes of the Commission's ex parte rules, interested parties may seek permission to file an amicus brief. The Commission "consider[s] on a case-by-case basis motions by non-parties wishing to submit amicus-type filings addressing the legal issues raised in [a] proceeding," and grants such requests when warranted. (If a party to the proceeding is a member of or is otherwise represented by an entity that requests leave to file an amicus brief, the entity must disclose that affiliation in its request.) Thus, for example, the Commission granted a motion for leave to file an amicus brief in a section 224 pole attachment complaint proceeding "in light of the broad policy issues at stake.

270. To further advance the values underlying multistakeholder processes—inclusivity, transparency, and expertise—we also amend our Part 8 formal complaint rules by delegating authority to the Enforcement Bureau, in its discretion, to request a written opinion from an outside technical organization. As reviewing courts have established, "[a] federal agency may turn to an outside entity for advice and policy recommendations, provided the agency makes the final decisions itself."

271. In this instance, given the potential complexity of the issues in open Internet formal complaint proceedings, it may be particularly useful to obtain objective advice from industry standard-setting bodies or other similar organizations. Providing Commission staff with this flexibility also will enable more informed determinations of technical Internet issues that reflect current industry standards and permit staff to keep pace with rapidly changing technology. (Whenever possible, the Enforcement Bureau should request advisory opinions from expert organizations whose members do not include any of the parties to the proceeding. If no such organization exists, the Enforcement

Bureau may refer issues to an expert organization with instructions that representatives of the parties to the complaint proceeding may not participate in the organization's consideration of the issues referred or the drafting of its advisory opinion.) Expert organizations will not be required to respond to requests from the Enforcement Bureau for opinions; however, any organization that elects to do so must provide the opinion within 30 days of the request—unless otherwise specified by the staff-in order to facilitate timely dispute resolution. We find that this approach will allow for the inclusivity the multistakeholder process offers, while also providing the predictability and legal certainty of the Commission's formal dispute resolution process.

272. For informal complaints and investigations, the Enforcement Bureau's efforts will continue to be informed by resolutions of formal complaints, and will also continue to be informed by the standards developed by existing multistakeholder, industry, and consumer groups. The Enforcement Bureau will also work with interested parties on an informal basis to identify ways to promote compliance with the open Internet rules.

F. Legal Authority

273. We ground the open Internet rules we adopt today in multiple sources of legal authority—section 706, Title II, and Title III of the Communications Act. We marshal all of these sources of authority toward a common statutorily-supported goal: To protect and promote Internet openness as platform for competition, free expression and innovation; a driver of economic growth; and an engine of the virtuous cycle of broadband deployment.

274. We therefore invoke multiple. complementary sources of legal authority. As a number of parties point out, our authority under section 706 is not mutually exclusive with our authority under Titles II and III of the Act. Rather, we read our statute to provide several, alternative sources of authority that work in concert toward common ends. As described below, under section 706, the Commission has the authority to adopt these open Internet rules to encourage and accelerate the deployment of broadband to all Americans. In the Declaratory Ruling and Order below, we find, based on the current factual record, that BIAS is a telecommunications service subject to Title II and exercise our forbearance authority to establish a "light-touch" regulatory regime, which includes the

application of sections 201 and 202. This finding both removes the common carrier limitation from the exercise of our affirmative section 706 authority and also allows us to exercise authority directly under sections 201 and 202 of the Communications Act in adopting today's rules. Finally, these rules are also supported by our Title III authority to protect the public interest through spectrum licensing. In this section, we discuss the basis and scope of each of these sources of authority and then explain their application to the open Internet rules we adopt today.

1. Section 706 Provides Affirmative Legal Authority for Our Open Internet Rules

275. Section 706 affords the Commission affirmative legal authority to adopt all of today's open Internet rules. Section 706(a) directs the Commission to take actions that "shall encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans." To do so, the Commission may utilize "in a manner consistent with the public interest, convenience, and necessity, price cap regulation, regulatory forbearance, measures that promote competition in the local telecommunications market, or other regulating methods that remove barriers to infrastructure investment." Section 706(b), in turn, directs that the Commission "shall take immediate action to accelerate deployment of such capability by removing barriers to infrastructure investment and by promoting competition in the telecommunications market," if it finds after inquiry that advanced telecommunications capability is not being deployed to all Americans in a reasonable and timely fashion. "Advanced telecommunications capability" is defined 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." Sections 706(a) and (b) each provide an express, affirmative grant of authority to the Commission and the rules we adopt today fall well within their scope.

276. Section $\overline{706}(a)$ and (b) Are Express Grants of Authority. In Verizon, the D.C. Circuit squarely upheld as reasonable the Commission's reading of section 706(a) as an affirmative grant of authority. (Verizon, 740 F.3d at 637 ("The question, then, is this: Does the Commission's current understanding of section 706(a) as a grant of regulatory authority represent a reasonable interpretation of an ambiguous statute? We believe it does.") A few commenters argue that the court incorrectly concluded that section 706(a) and (b) are express grants of authority. For the reasons discussed in the text, by the Commission in the 2010 Open Internet Order, and the court in Verizon and In re FCC, we disagree.) Finding that provision ambiguous, the court upheld the Commission's interpretation as consistent with the statutory text, (As the Verizon court explained, for example, "section 706(a)'s reference to state commissions does not foreclose such a reading" of section 706(a) as an express grant of authority. Id. at 638. Nor, as one of the dissents suggests, (see Pai Dissent at 55), is the statute's reference to "[s]tate commission" rendered meaningless by the Commission's reaffirmation that BIAS is an interstate service for regulatory purposes. The Commission's interpretation does not preclude all state commission action in this area, just that which is inconsistent with the federal regulatory regime we adopt today.) legislative history, and the Commission's lengthy history of regulating Internet access.

277. Separately addressing section 706(b), the D.C. Circuit held, citing similar reasons, that the "Commission has reasonably interpreted section 706(b) to empower it to take steps to accelerate broadband deployment if and when it determines that such deployment is not "reasonable and timely." The 10th Circuit, in upholding the Commission's reform of our universal service and inter-carrier compensation regulatory regime, likewise concluded that the Commission reasonably construed section 706(b) as an additional source of authority for those regulations.

278. In January, the Commission adopted the 2015 Broadband Progress Report, which determined that advanced telecommunications capability is not being deployed in a reasonable and timely manner to all Americans. That determination triggered our authority under section 706(b) to take immediate action, including the adoption of today's open Internet rules, to accelerate broadband deployment to all Americans.

279. We interpret sections 706(a) and 706(b) as independent, complementary sources of affirmative Commission authority for today's rules. Our interpretation of section 706(a) as a grant of express authority is in no way dependent upon our findings in the section 706(b) inquiry. Thus, even if the Commission's inquiry were to have resulted in a positive conclusion such

that our section 706(b) authority were not triggered this would not eliminate the Commission's authority to take actions to encourage broadband deployment under section 706(a). (The Commission takes such measures precisely to achieve section 706(b)'s goal of accelerating deployment. That they may succeed in achieving that goal so as to contribute to a positive section 706(b) finding does not subsequently render them unnecessary or unauthorized without any further Commission process. Even if that were not the case, independent section 706(a) authority would remain. We mention, however, two legal requirements that appear relevant. First, section 408 of the Act mandates that "all" FCC orders (other than orders for the payment of money) "shall continue in force for the period of time specified in the Order or until the Commission or a court of competent jurisdiction issues a superseding Order." 47 U.S.C. 408. Second, the Commission has a "continuing obligation to practice reasoned decisionmaking" that includes revisiting prior decisions to the extent warranted. Aeronautical Radio v. FCC. 928 F.2d 428 (D.C. Cir. 1991). We are aware of no reason why these requirements would not apply in this context.)

280. We reject arguments that we lack rulemaking authority to implement section 706 of the 1996 Act. In Verizon. the D.C. Circuit suggested that section 706 was part of the Communications Act of 1934. Under such a reading, the Commission would have all its standard rulemaking authority under sections 4(i), 201(b) and 303(r) to adopt rules implementing that provision. (47 U.S.C. 154(i) ("The Commission may . . . make such rules and regulations . . . not inconsistent with this chapter, as may be necessary in the execution of its functions."); 47 U.S.C. 201(b) ("The Commission may prescribe such rules and regulations as may be necessary in the public interest to carry out the provisions of this chapter."); 47 U.S.C. 303(r) ("Except as otherwise provided in this chapter, the Commission from time to time, as public convenience, interest, or necessity requires, shall . . . [m]ake such rules and regulations and prescribe such restrictions and conditions, not inconsistent with law, as may be necessary to carry out the provisions of this chapter"). Even if this were not the case, by its terms our section 4(i) rulemaking authority is not limited just to the adoption of rules pursuant to substantive jurisdiction under the Communications Act, and the Verizon court cited as reasonable the

Commission's view that Congress, in placing upon the Commission the obligation to carry out the purposes of section 706, "necessarily invested the Commission with the statutory authority to carry out those acts."

281. The Open Internet Rules Fall Well Within the Scope of Our section 706 Authority. In Verizon, the D.C. Circuit agreed with the Commission that while authority under section 706 may be broad, it is not unbounded. Both the Commission and the court have articulated its limits. First, section 706 regulations must be within the scope of the Commission's subject matter jurisdiction over "interstate and foreign communications by wire and radio.' (Some have read this to require that regulations under section 706 must be ancillary to existing Commission authority in Title II, III or VI of the Act. We disagree. To be sure, with the Commission's exercise of both section 706 and ancillary authority, regulations must be within the Commission's subject matter jurisdiction. Indeed, this is the first prong of the test for ancillary jurisdiction. American Library Ass'n v. FCC, 406 F.3d 689, 703–04 (D.C. Cir. 2005). But we do not read the Verizon decision as applying the second prongwhich requires that the regulation be sufficiently linked to another provision of the Act-to our exercise of section 706 authority. Section 706 "does not limit the Commission to using other regulatory authority already at its disposal, but instead grants it the power necessary to fulfill the statute's mandate." See Verizon, 740 F.3d at 641 (citing 2010 Open Internet Order, 25 FCC Rcd at 17972, para. 123)) And second, any such regulations must be designed to achieve the purpose of section 706(a)—to "encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans.'

282. In Verizon, the court firmly concluded that the Commission's 2010 Open Internet Order regulations fell within the scope of section 706. It explained that the rules "not only apply directly to broadband providers, the precise entities to which section 706 authority to encourage broadband deployment presumably extends, but also seek to promote the very goal that Congress explicitly sought to promote." Further, the court credited "the Commission's prediction that the Open Internet Order regulations will encourage broadband deployment." The same is true of the open Internet rules we adopt today. Our regulations again only apply to last-mile providers of broadband services-services that are not only within our subject matter

jurisdiction, but also expressly within the terms of section 706. (In response to parties expressing concerns that section 706 could be read to impose regulations on edge providers or others in the Internet ecosystem, we emphasize that today's rules apply only to last-mile broadband providers. We reject calls from other commenters to exercise our section 706 authority to adopt open Internet regulations for edge providers. Today's rules are specifically designed to address broadband providers' incentives and ability to erect barriers that harm the virtuous cycle. We see no basis for applying these rules to any other providers.) And, again, each of our rules is designed to remove barriers in order to achieve the express purposes of section 706. We also find that our rules will provide additional benefits by promoting competition in telecommunications markets, for example, by fostering competitive provision of VoIP and video services and informing consumers' choices.

2. Authority for the Open Internet Rules Under Title II with Forbearance

283. In light of our Declaratory Ruling below, the rules we adopt today are also supported by our legal authority under Title II to regulate telecommunications services. For the reasons set forth below, we have found that BIAS is a telecommunications service and, for mobile broadband, commercial mobile services or its functional equivalent. While we forbear from applying many of the Title II regulations to this service, we have applied sections 201, 202, and 208 (along with related enforcement authorities). These provisions provide an alternative source of legal authority for today's rules.

284. Šection 201(a) places a duty on common carriers to furnish communications services subject to Title II "upon reasonable request" and "establish physical connections with other carriers" where the Commission finds it to be in the public interest. Section 201(b) provides that "[a]ll charges, practices, classifications, and regulations for and in connection with such communication service, shall be just and reasonable, and any such charge, practice, classification, or regulation that is unjust or unreasonable is declared to be unlawful." It also gives the Commission the authority to "prescribe such rules and regulations as may be necessary in the public interest to carry out the provisions of this chapter." Section 202(a) makes it "unlawful for any common carrier to make any unjust or unreasonable discrimination in charges, practices, classifications, regulations, facilities, or

services for or in connection with like communication service, directly or indirectly, by any means or device, or to make or give any undue or unreasonable preference or advantage to any particular person, class of persons, or locality, or to subject any particular person, class of persons, or locality to any undue or unreasonable prejudice or disadvantage." As described below, these provisions provide additional independent authority for the rules we adopt today.

3. Title III Provides Additional Authority for Mobile Broadband Services

285. With respect to mobile broadband Internet access services, today's open Internet rules are further supported by our authority under Title III of the Act to protect the public interest through spectrum licensing. While this authority is not unbounded, we exercise it here in reliance upon particular Title III delegations of authority.

286. Section 303(b) directs the Commission, consistent with the public interest, to "[p]rescribe the nature of the service to be rendered by each class of licensed stations and each station within any class." Today's conduct regulations do precisely this. They lay down rules about "the nature of the service to be rendered" by licensed entities providing mobile broadband Internet access service, making clear that this service may not be offered in ways that harm the virtuous cycle. Today's rules specify the form this service must take for those who seek licenses to offer it. In providing such licensed service, broadband providers must adhere to the rules we adopt today.

287. This authority is bolstered by at least two additional provisions. First, as the D.C. Circuit has explained, section 303(r) supplements the Commission's ability to carry out its mandates via rulemaking. Second, section 316 authorizes the Commission to adopt new conditions on existing licenses if it determines that such action "will promote the public interest, convenience, and necessity." (The Commission also has ample authority to impose conditions to serve the public interest in awarding licenses in the first instance. See 47 U.S.C. 309(a); 307(a).) Nor do today's rules work any fundamental change to those licenses. Rather we understand our rules to be largely consistent with the current operation of the Internet and the current practices of mobile broadband service providers.

4. Applying These Legal Authorities to Our Open Internet Rules

288. Bright line rules. Applying these statutory sources of authority, we have ample legal bases on which to adopt the three bright-line rules against blocking, throttling, and paid prioritization. To begin, we have found that broadband providers have the incentive and ability to engage in such practices—which disrupt the unity of interests between end users and edge providers and thus threaten the virtuous cycle of broadband deployment. As the D.C. Circuit found with respect to the 2010 conduct rules, such broadband provider practices fall squarely within our section 706 authority. The court struck down the 2010 conduct rules after finding that the Commission failed to provide a legal justification that would take the rules out of the realm of impermissibly mandating common carriage, but did not find anything impermissible about the need for such rules to protect the virtuous cycle. Given our classification of broadband Internet access service as a telecommunications service, the court's rationale for vacating our 2010 conduct rules no longer applies and, for the reasons discussed above, we have legal justification to support our brightline rules under section 706.

289. Our bright-line rules are also well grounded in our Title II authority. In Title II contexts, the Commission has made clear that blocking traffic generally is unjust and unreasonable under section 201. The Commission has likewise found it unjust and unreasonable for a carrier to refuse to allow non-harmful devices to attach to the network. And with respect to throttling, Commission precedent has likewise held that "no carriers . . . may block, choke, reduce or restrict traffic in any way." We see no basis for departing from such precedents in the case of broadband Internet access services. As discussed above, the record here demonstrates that blocking and throttling broadband Internet access services harm consumers and edge providers, threaten the virtuous cycle, and deter broadband deployment. Consistent with our prior Title II precedents, we conclude that blocking and throttling of broadband Internet access services is an unjust and unreasonable practice under section 201(b).

290. Some parties have suggested that the Commission cannot adopt a rule banning paid prioritization under Title II. We disagree and conclude that paid prioritization is an unjust and unreasonable practice under section 201(b). The unjust and unreasonable standards in sections 201 and 202 afford the Commission significant discretion to distinguish acceptable behavior from behavior that violates the Act. Indeed, the very terms "unjust" and "unreasonable" are broad, inviting the Commission to undertake the kind of line-drawing that is necessary to differentiate just and reasonable behavior on the one hand from unjust and unreasonable behavior on the other. (As the D.C. Circuit has stated, for example, "the generality of these terms ... opens a rather large area for the free play of agency discretion, limited of course by the familiar 'arbitrary' and 'capricious' standard in the Administrative Procedure Act." Bell Atlantic Tel. Co. v. FCC, 79 F.3d 1195, 1202 (D.C. Cir. 1996). Stated differently, because both sections "set out broad standards of conduct," it is up to the "Commission [to] give[] the standards meaning by defining practices that run afoul of carriers' obligation, either by rulemaking or by case-by-case adjudication.")

291. Acting within this discretion, the Commission has exercised its authority, both through adjudication and rulemaking, under section 201(b) to ban unjust and unreasonable carrier practices as unlawful under the Act. (The Commission need not proceed through adjudication in announcing a broad ban on a particular practice. Indeed, the text of section 201(b) itself gives the Commission authority to 'prescribe such rules and regulations as may be necessary in the public interest to carry out the provisions of this chapter." 47 U.S.C. 201(b).) Although the particular circumstances have varied, in reviewing these precedents, we find that the Commission generally takes this step where necessary to protect competition and consumers against carrier practices for which there was either no cognizable justification for the action or where the public interest in banning the practice outweighed any countervailing policy concerns. Based on the record here, we find that paid prioritization presents just such a case, threatening harms to consumers, competition, innovation, and deployment that outweigh any possible countervailing justification of public interest benefit. Our interpretation and application of section 201(b) in this case to ban paid prioritization is further bolstered by the directive in section 706 to take actions that will further broadband deployment.

292. Several commenters argue that we cannot ban paid prioritization under section 202(a), pointing to Commission precedents allowing carriers to engage in discrimination so long as it is reasonable. As discussed above, however, we adopt this rule pursuant to sections 201(b) and 706, not 202(a). And nothing about section 202(a) prevents us from doing so. We recognize that the Commission has historically interpreted section 202(a) to allow carriers to engage in reasonable discrimination, including by charging some customers more for better, faster, or more service. But those precedents stand for the proposition that such discrimination is *permitted*, not that it must be allowed in all cases. (To be sure, section 202(a) prohibits "unreasonable discrimination" for "like" communications services. But this provision does not, on its face, deprive the Commission of the authority to take actions under other provisions of the Act against discrimination that may not constitute "unreasonable discrimination" under section 202(a).) None of those cases of discrimination presented the kinds of harms demonstrated in the record here—harms that form the basis of our decision to ban the practice as unjust and unreasonable under section 201(b), not 202(a). Furthermore, none of those precedents involved practices that the Commission has twice found threaten to create barriers to broadband deployment that should be removed under section 706. In light of our discretion in interpreting and applying sections 201 and 202 and insofar as section 706(a) is ''a 'fail-safe' that 'ensures' the Commission's ability to promote advanced services," we decline to interpret section 202(a) as preventing the Commission from exercising its authority under sections 201(b) and 706 to ban paid prioritization practices that harm Internet openness and deployment. (To the extent our prior precedents suggest otherwise, for the reasons discussed in the text, we disavow such an interpretation as applied to the open Internet context.)

293. With respect to mobile broadband Internet access services, our bright-line rules are also grounded in the Commission's Title III authority to ensure that spectrum licensees are providing service in a manner consistent with the public interest.

294. No-Unreasonable Interference/ Disadvantage Standard. As with our bright-line rules, the no-unreasonable interference/disadvantage standard we adopt today is supported by our section 706 authority. Beyond the practices addressed by our bright-line rules, we recognize that broadband providers may implement unknown practices or engage in new types of practices in the future that could threaten harm by unreasonably interfering with the ability of end users and edge providers to use

broadband Internet access services to reach one another. Such unreasonable interference creates a barrier that impedes the virtuous cycle, threatening the open nature of the Internet to the detriment of consumers, competition, and deployment. For conduct outside the three bright-line rules, we adopt the no-unreasonable interference/ disadvantage standard to ensure that broadband providers do not engage in practices that threaten the open nature of the Internet in other or novel ways. This standard is tailored to the open Internet harms we wish to prevent, including harms to consumers, competition, innovation, and free expression-all of which could impair the virtuous cycle and thus deter broadband deployment, undermining the goals of section 706.

295. The no-unreasonable interference/disadvantage standard is also supported by section 201 and 202 of the Act, which require broadband providers to engage in practices that are just and reasonable, and not unreasonably discriminatory. The prohibition on no-unreasonable interference/disadvantage represents our interpretation of these 201 and 202 obligations in the open Internet context-an interpretation that is informed by section 706's goals of promoting broadband deployment. (Given the generality of the terms in sections 201 and 202, the Commission has significant discretion when interpreting how those sections apply to the different services subject to Title II.) In other words, for BIAS, we will evaluate whether a practice is unjust, unreasonable, or unreasonably discriminatory using this nounreasonable interference/disadvantage standard. We note, however, that this rule-on its own-does not constitute common carriage per se. (Not all requirements which apply to common carriers need impose common carriage per se. See Verizon, 740 F.3d at 652 (citing Cellco, 700 F.3d at 547 ("[C]ommon carriage is not all or nothing—there is a gray area in which although a given regulation might be applied to common carriers, the obligations imposed are not common carriage *per se*. It is in this realm—the space between *per se* common carriage and *per se* private carriage—that the Commission's determination that a regulation does or does not confer common carrier status warrants deference.")); Id. at 653 (citing NARUC v. FCC, 533 F.2d 601, 608 (D.C. Cir. 1976) (NARUC II) ("Since it is clearly possible for a given entity to carry on many types of activities, it is at least

logical to conclude that one may be a common carrier with regard to some activities but not others.")).) The nounreasonable interference/disadvantage standard, standing alone, contains no obligation to provide broadband service to any consumer or edge provider and would not, in its isolated application, necessarily preclude individualized negotiations so long as they do not otherwise unreasonably interfere with the ability of end users and edge providers to use broadband Internet access services to reach one another. Rather, particular practices or arrangements that are not barred by our rules against blocking, throttling, and paid prioritization will be evaluated based on the facts and circumstances they present using a series of factors specifically designed to protect the virtuous cycle of innovation and deployment. Thus, this is a rule tied to particular harms. Broadband providers, having chosen to provide BIAS, may not do so in a way that harms the virtuous cvcle.

296. For mobile broadband providers, the no-unreasonable interference/ disadvantage standard finds additional support in the Commission's Title III authority as discussed above. The Commission has authority to ensure that broadband providers, having obtained a spectrum license to provide mobile broadband service, must provide that service in a manner consistent with the public interest. (The Commission has broad authority to prescribe the nature of services to be rendered by licensed stations, consistent with the public interest. 47 U.S.C. 303(b); Cellco Partnership v. FCC, 700 F.3d 534, 542 (D.C. Cir. 2012) ("Although Title III does not 'confer an unlimited power,' the Supreme Court has emphasized that it does endow the Commission with 'expansive powers' and a 'comprehensive mandate to 'encourage the larger and more effective use of radio in the public interest.' '') (internal citations omitted) (quoting NBC v. United States, 319 U.S. 190, 216, 219 (1943)).) This standard provides guidance on how the Commission will evaluate particular broadband practices, not otherwise barred by our bright-line rules, to ensure that they are consistent with the public interest.

297. *Transparency Rule.* The D.C. Circuit severed and upheld the Commission's 2010 transparency rule in *Verizon.* While the majority did not expressly opine on the legal authority for the Commission's prior transparency rule, we feel confident that like the 2010 transparency rule, the enhanced transparency rule we adopt today falls well within multiple, independent

sources of the Commission's authority. Beginning with section 706, the transparency rule ensures that consumers have sufficient information to make informed choices thereby facilitating competition in the local telecommunications market (to the extent competitive choices are available). (To encourage deployment of ''advanced telecommunications capability," section 706(a) authorizes the Commission to engage in measures that "promote competition in the local telecommunications market." 47 U.S.C. 1302(a). And section 706(b) references "promoting competition in the telecommunications market" as among the immediate actions that Commission shall take to accelerate deployment of "advanced telecommunications capability" upon a determination that it is not being reasonably and timely deployed. 47 U.S.C. 1302(b). We interpret these references to the "telecommunications market" to include the market for "advanced telecommunications capability." In any event, having classified broadband Internet access services as "telecommunications services," the Commission actions to promote competition among broadband Internet access services clearly promote competition in the "telecommunications market.") Furthermore, these disclosures remove potential information barriers by ensuring that edge providers have the necessary information to develop innovative products and services that rely on the broadband networks to reach consumers, a crucial arc of the virtuous cycle of broadband deployment. Our transparency rule is also supported by Title II. The Commission has relied on section 201(b) in related billing contexts to ensure that carriers convey accurate and sufficient information about the services they provide to consumers. We do so here as well. (For the reasons discussed above, we likewise rely on Title III to ensure that spectrum licensees provide mobile broadband Internet access service consistent with the public interest.)

298. *Enforcement.* We also make clear that we have ample authority to enforce the rules we adopt today. Our rules today carry out the provisions of the Communications Act and are thus are covered by our Title IV and V authorities to investigate and enforce violations of these rules. With specific respect to section 706, as noted above, in *Verizon*, the D.C. Circuit suggested that section 706 was part of the Communications Act of 1934. Under such a reading, rules adopted pursuant

to section 706 fall within our Title IV and V authorities. But even if this were not the case, we believe it reasonable to interpret section 706 itself as a grant of authority to investigate and enforce our rules. (Moreover, as discussed above, to the extent that section 706 was not viewed as part of the Communications Act, we have authority under section 4(i) of the Communications Act to adopt rules implementing section 706. Thus, even then the Commission's rules, insofar as they are based on our substantive jurisdiction under section 706, nonetheless would be issued under the Communications Act.) Our enforcement authority was not explicitly discussed in either the 2010 Open Internet Order or the Verizon case. As noted above, the court did cite as reasonable, however, the Commission's view that Congress, in placing upon the Commission the obligation to carry out the purposes of section 706, "necessarily invested the Commission with the statutory authority to carry out those acts." We believe it likewise reasonable to conclude that, having provided the Commission with affirmative legal authority to take regulatory measures to further section 706's goals, Congress invested the Commission with the authority to enforce those measures as needed to ensure those goals are achieved. Indeed, some have suggested that the Commission could take enforcement action pursuant to section 706 itself, without adopting rules.

G. Other Laws and Considerations

299. In the 2014 Open Internet NPRM, the Commission tentatively concluded that it should retain provisions which make clear that the open Internet rules do not alter broadband providers' rights or obligations with respect to other laws, safety and security considerations, or the ability of broadband providers to make reasonable efforts to address transfers of unlawful content and unlawful transfers of content. We affirm this tentative conclusion and reiterate today that our rules are not intended to expand or contract broadband providers' rights or obligations with respect to other laws or safety and security considerations—including the needs of emergency communications and law enforcement, public safety, and national security authorities. Similarly, open Internet rules protect only *lawful* content, and are not intended to inhibit efforts by broadband providers to address unlawful transfers of content or transfers of unlawful content.

1. Emergency Communications and Safety and Security Authorities

300. In the 2010 Open Internet Order we adopted a rule that acknowledges the ability of broadband providers to serve the needs of law enforcement and the needs of emergency communications and public safety, national, and homeland security authorities. This rule remains in effect today. To make clear that open Internet protections coexist with other legal frameworks governing the needs of safety and security authorities, we retain this rule, which reads as follows:

Nothing in this part supersedes any obligation or authorization a provider of broadband Internet access service may have to address the needs of emergency communications or law enforcement, public safety, or national security authorities, consistent with or as permitted by applicable law, or limits the provider's ability to do so.

301. In retaining this rule, we reiterate that the purpose of the safety and security provision is first to ensure that open Internet rules do not restrict broadband providers in addressing the needs of law enforcement authorities, and second to ensure that broadband providers do not use the safety and security provision without the imprimatur of a law enforcement authority, as a loophole to the rules. Application of the safety and security rule should be tied to invocation by relevant authorities rather than to a broadband provider's independent notion of the needs of law enforcement.

302. The record is generally supportive of our proposal to reiterate that open Internet rules do not supersede any obligation a broadband provider may have—or limit its ability-to address the needs of emergency communications or law enforcement, public safety, or homeland or national security authorities (together, "safety and security authorities"). Broadband providers have obligations under statutes such as the Communications Assistance for Law Enforcement Act, the Foreign Intelligence Surveillance Act, and the Electronic Communications Privacy Act that could in some circumstances intersect with open Internet protections. Likewise, in connection with an emergency, there may be federal, state, tribal, and local public safety entities, homeland security personnel, and other authorities that need guaranteed or prioritized access to the Internet in order to coordinate disaster relief and other emergency response efforts, or for other emergency communications. Most commenters recognize the benefits of clarifying that

these obligations are not inconsistent with open Internet rules.

303. Some commenters have proposed revisions to the existing rule which would expand its application to public utilities and other critical infrastructure operators. Because we make sufficient accommodation for these concerns elsewhere, we choose not to modify this provision to include critical infrastructure.

2. Transfers of Unlawful Content and Unlawful Transfers of Content

304. In the NPRM, we tentatively concluded that we should retain the definition of reasonable network management we previously adopted, which does not include preventing transfer of unlawful content or the unlawful transfer of content as a reasonable practice. We affirm this tentative conclusion and re-state that open Internet rules do not prohibit broadband providers from making reasonable efforts to address the transfer of unlawful content or unlawful transfers of content to ensure that open Internet rules are not used as a shield to enable unlawful activity or to deter prompt action against such activity. For example, the no-blocking rule should not be invoked to protect copyright infringement, which has adverse consequences for the economy, nor should it protect child pornography. We reiterate that our rules do not alter the copyright laws and are not intended to prohibit or discourage voluntary practices undertaken to address or mitigate the occurrence of copyright infringement. After consideration of the record, we retain this rule, which is applicable to both fixed and mobile broadband providers engaged in broadband Internet access service and reads as follows:

Nothing in this part prohibits reasonable efforts by a provider of broadband Internet access service to address copyright infringement or other unlawful activity.

305. Some commenters contend that this rule promotes the widespread use of intrusive packet inspection technologies by broadband providers to filter objectionable content and that such monitoring poses a threat to customers' privacy rights. Certainly, many broadband providers have the technical tools to conduct deep packet inspection of unencrypted traffic on their networks, and consumer privacy is a paramount concern in the Internet age. Nevertheless, we believe that broadband monitoring concerns are adequately addressed by the rules we adopt today, so we decline to alter this provision. This rule is limited to protecting

"reasonable efforts . . . to address copyright infringement or other unlawful activity." We retain the discretion to evaluate the reasonableness of broadband providers' practices under this rule on a case-bycase basis. Consumers also have many tools at their disposal to protect their privacy against deep packet inspection—including SSL encryption, virtual private networks, and routing methods like TOR. Further, the complaint processes we adopt today add to these technical methods and advance consumer interests in this area.

IV. Declaratory Ruling: Classification of Broadband Internet Access Services

306. 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.'

307. The Verizon decision thus made clear that section 706 affords the Commission with 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 may only rely on section 706 to put in place open Internet protections that steer clear of what the court described as common carriage per se regulation.

308. Taking the *Verizon* decision's implicit invitation, we revisit the Commission's classification of the retail broadband Internet access service as an information service (The Commission has previously classified cable modem Internet access service, wireline broadband Internet access service, and Broadband over Power Line (BPL)enabled Internet access service as information services. The Commission has referred to these services as "wired" broadband Internet access services. The Commission has also previously

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classified "wireless" broadband Internet access, which it defined as a service that "uses spectrum, wireless facilities and wireless technologies to provide subscribers with high-speed (broadband) Internet access capabilities, . . whether offered using mobile, portable, or fixed technologies," as information services) and clarify that this service encompasses the so-called "edge service." Based on the updated record, we conclude that retail broadband Internet access service is best understood today as an offering of a "telecommunications service." (As discussed in greater detail below, our classification decision arises from our reconsideration of past interpretations and applications of the Act. We thus conclude that the classification decisions in this Order appropriately apply only on a prospective basis. See, e.g., Verizon v. FCC, 269 F.3d 1098 (D.C. Cir. 2001) ("In a case in which there is a substitution of new law for old law that was reasonably clear, a decision to deny retroactive effect is uncontroversial.") (internal quotations omitted).)

309. Below we discuss the history of the classification of broadband Internet access service, describe our rationale for revisiting that classification, and provide a detailed explanation of our reclassification of broadband Internet access service.

A. History of Broadband Internet Classification

310. Congress created the Commission "[f]or the purpose of regulating interstate and foreign commerce in communication by wire and radio so as to make available, so far as possible, to all people of the United States . . . a rapid, efficient, Nation-wide, and worldwide wire and radio communication service with adequate facilities at reasonable charges, for the purpose of the national defense, [and] for the purpose of promoting safety of life and property through the use of wire and radio communication." section 2 of the Communications Act grants the Commission jurisdiction over "all interstate and foreign communication by wire or radio." As the Supreme Court explained in the radio context, Congress charged the Commission with "regulating a field of enterprise the dominant characteristic of which was the rapid pace of its unfolding" and therefore intended to give the Commission sufficiently "broad" authority to address new issues that arise with respect to "fluid and dynamic" communications technologies. (National Broadcasting Co., Inc. v. United States, 319 U.S. 190,

219 (1943). The Court added that "[i]n the context of the developing problems to which it was directed, the Act gave the Commission . . . expansive powers . . . [and] a comprehensive mandate.") No one disputes that Internet access services are within the Commission's subject-matter jurisdiction and historically have been supervised by the Commission.

311. The Computer Inquiries. In 1966, the Commission initiated its Computer Inquiries "to ascertain whether the services and facilities offered by common carriers are compatible with the present and anticipated communications requirements of computer users." In the decision known as Computer I, the Commission required "maximum separation" between large carriers that offered data transmission services subject to common carrier requirements and their affiliates that sold data processing services. Refining this approach, in Computer II and *Computer III* the Commission required telephone companies that provided "enhanced services" over their own transmission facilities to separate out and offer on a common carrier basis the transmission component underlying their enhanced services.

312. Commenters disagree about the significance of the Computer Inquiries. We believe the *Computer Inquiries* are relevant in at least two important respects. First, in Computer II the Commission distinguished "basic" from "enhanced" services, a distinction that Congress embraced when it adopted the Telecommunications Act of 1996. Basic services offered on a common carrier basis were subject to Title II; enhanced services were not. When Congress enacted the definitions of "telecommunications service" and "information service" in the Telecommunications Act of 1996, it substantially incorporated the "basic" and "enhanced" service classifications. Because the statutory definitions substantially incorporated the Commission's terminology under the Computer Inquiries, Commission decisions regarding the distinction between basic and enhanced servicesin particular, decisions regarding features that are "adjunct to basic" services-are relevant in this proceeding. (The Commission's definition of "adjunct to basic" services has been instrumental in determining which functions fall within the "telecommunications systems management" exception to the "information service" definition.)

313. Second, the *Computer Inquiries* disprove the claim that the Commission has never before mandatorily applied

Title II to the transmission component of Internet access service. (As discussed below, a large number of rural local exchange carriers (LECs) have also chosen to offer broadband transmission service as a telecommunications service subject to the provisions of Title II.) From 1980 to 2005, facilities-based telephone companies were obligated to offer the transmission component of their enhanced service offeringsincluding broadband Internet access service offered via digital subscriber line (DSL)-to unaffiliated enhanced service providers on nondiscriminatory terms and conditions pursuant to tariffs or contracts governed by Title II. There is no disputing that until 2005, Title II applied to the transmission component of DSL service.

314. Prior Classification Decisions. Several commenters, as well as the dissenting statements, claim that an unbroken line of Commission and court precedent, dating back to the Stevens *Report* in 1998, supports the classification of Internet access service as an information service, and that this classification is effectively etched in stone. These commenters ignore not only the Supreme Court but our precedent demonstrating that the relevant statutory definitions are ambiguous, and that classifying broadband Internet access service as a telecommunications service is a permissible interpretation of the Act. Indeed, several of the most vocal opponents of reclassification previously argued that the Commission not only may, but should, classify the transmission component of broadband Internet access service as a telecommunications service. (Contemporaneously, Verizon and the United States Telecom Association argued in the Gulf Power litigation before the Supreme Court that cable modem service includes a telecommunications service.)

315. To begin with, these commenters misconstrue the scope of the Stevens *Report,* which was a report to Congress concerning the implementation of universal service mandates, and not a binding Commission Order classifying Internet access services. Moreover, when the Commission issued that report, in 1998, broadband Internet access service was at "an early stage of deployment to residential customers' and constituted a tiny fraction of all Internet connections. Virtually all households with Internet connections used traditional telephone service to dial-up their Internet Service Provider (ISP), which was typically a separate entity from their telephone company. In the Stevens Report, the Commission

stated that Internet access service as it was then typically being provided was an "information service." The *Stevens* Report reserved judgment on whether entities that provided Internet access over their own network facilities were offering a separate telecommunications service. The Commission further noted that "the question may not always be straightforward whether, on the one hand, an entity is providing a single information service with communications and computing components, or, on the other hand, is providing two distinct services, one of which is a telecommunications service." A few months after sending the *Stevens Report* to Congress, the Commission concluded that "[a]n end-user may utilize a telecommunications service together with an information service, as in the case of Internet access." In a follow-up order, the Commission affirmed its conclusion that "xDSLbased advanced services constitute telecommunications services as defined by section 3(46) of the Act." (The definition of telecommunications service is now in section 3(53) of the Act. 47 U.S.C. 153(53). The Advanced Services Remand Order was vacated in part by the D.C. Circuit in WorldCom v. FCC, 246 F.3d 690 (D.C. Cir. 2001). Specifically, the D.C. Circuit vacated the remand of the Commission's classification of DSL-based advanced services as "telephone exchange service'' or ''exchange access.' "Telephone exchange service" and "exchange access" are relevant in determining whether a provider is a "local exchange carrier." It has no bearing on the classification of a particular service offering as a telecommunications or information service under the Act. As such, the further history of the Advanced Services Remand Order is inapposite to the Commission's discussion of telecommunications and information services in that Order.)

316. The courts addressed the statutory classification of broadband Internet access service in June 2000, when the United States Court of Appeals for the Ninth Circuit held in AT&T Corp. v. City of Portland that cable modem service is a telecommunications service to the extent that the cable operator "provides its subscribers Internet transmission over its cable broadband facility," and an information service to the extent the operator acts as a "conventional" ISP. The Ninth Circuit's decision thus put cable companies' broadband transmission service on a regulatory par with DSL transmission service. (In 2001,

SBC Communications and BellSouth acknowledged the significance of the Computer Inquiries, the Advanced Services Order, and the Ninth Circuit's decision in City of Portland: "The Commission currently views the DSLenabled transmission path underlying incumbent LEC broadband Internet services as a 'telecommunications service' under the Act. As the Ninth Circuit recognized, the exact same logic applies to cable broadband: 'to the extent that [a cable ISP] provides its subscribers Internet transmission over its cable broadband facility, it is providing a telecommunications service as defined in the Communications Act.' ") 317. Three months later, the

Commission issued the Cable Modem Notice of Inquiry, which sought comment on whether cable modem service should be treated as a telecommunications service under Title II or an information service subject to Title I. In response, the Bell Operating Companies (BOCs) unanimously argued that the Commission lawfully could determine that cable modem service includes a telecommunications service. Verizon and Qwest argued that the transmission component of cable modem service is a telecommunications service. SBC Communications and BellSouth (both now part of AT&T) argued that the Commission should classify cable modem service as an integrated information service subject to Title I, but acknowledged that the Commission could lawfully find that cable modem service includes both a telecommunications service and an information service. Verizon, SBC, and BellSouth also agreed that the Commission could adopt a "middle ground" legal framework by finding that cable modem service is, in part, a telecommunications service, but grant relief from pricing and tariffing obligations by either declaring all providers of broadband Internet access service to be nondominant or by forbearing from enforcing those obligations. (Cable operators generally argued that the Commission should classify cable modem service as either a cable service or an information service, but not as a telecommunications service.)

318. In March 2002, the Commission exercised its authority to interpret ambiguous language in the Act and addressed the classification of cable modem service in the *Cable Modem Declaratory Ruling*. The Commission stated that "[t]he Communications Act does not clearly indicate how cable modem service should be classified or regulated." Based on a factual record

that had been compiled at that time, the Commission described cable modem service as "typically includ[ing] many and sometimes all of the functions made available through dial-up Internet access service, including content, email accounts, access to news groups, the ability to create a personal Web page, and the ability to retrieve information from the Internet." The Commission noted that cable modem providers often consolidated these functions "so that subscribers usually do not need to contract separately with another Internet access provider to obtain discrete services or applications." (The Commission defined cable modem service as "a service that uses cable system facilities to provide residential subscribers with high-speed Internet access, as well as many applications or functions that can be used with highspeed Internet access.")

319. The Commission identified a portion of cable modem service as "Internet connectivity," which it described as establishing a physical connection to the Internet and operating or interconnecting with the Internet backbone, and sometimes including protocol conversion, Internet Protocol (IP) address number assignment, DNS, network security, caching, network monitoring, capacity engineering and management, fault management, and troubleshooting. The Ruling also noted that "[n]etwork monitoring, capacity engineering and management, fault management, and troubleshooting are Internet access service functions that

. . . serve to provide a steady and accurate flow of information between the cable system to which the subscriber is connected and the Internet." The Commission distinguished these functions from "Internet applications provided through cable modem services," including "email, access to online newsgroups, and creating or obtaining and aggregating content," "home pages," and "the ability to create a personal Web page."

320. The Commission found that cable modem service was "an offering . . . which combines the transmission of data with computer processing, information provision, and computer interactivity, enabling end users to run a variety of applications." The Commission further concluded that, "as it [was] currently offered," cable modem service as a whole met the statutory definition of "information service' because its components were best viewed as a "single, integrated service that enables the subscriber to utilize Internet access service," with a telecommunications component that was "not . . . separable from the data

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processing capabilities of the service." Significantly, the Commission did not address whether DNS or any other features of cable modem service fell within the telecommunications systems management exception to the definition of "information service" as there was no reason to do so. The Cable Modem Declaratory Ruling also included a notice of proposed rulemaking seeking comment on, among other things, whether the Commission should require cable operators to give unaffiliated broadband Internet access service providers access to cable broadband networks.

321. In October 2003, the United States Court of Appeals for the Ninth Circuit vacated the Commission's finding that cable modem service is an integrated information service. The court concluded that it was bound by the prior decision in *City of Portland* that "the transmission element of cable broadband service constitutes telecommunications service under the terms of the Communications Act."

322. In 2005, the Supreme Court reversed the Ninth Circuit's decision and upheld the *Cable Modem Declaratory Ruling* in *Brand X*. The Court held that the word "offering" in the Communications Act's definitions of "telecommunications service" and "information service" is ambiguous, and that the Commission's finding that cable modem service is a functionally integrated information service was a permissible, though perhaps not the best, interpretation of the Act.

323. Following Brand X, the Commission issued the Wireline Broadband Classification Order, which applied the "information services" classification at issue in the Cable Modem Declaratory Ruling to facilitiesbased wireline broadband Internet access services as well and eliminated the resulting regulatory asymmetry between cable companies and telephone companies offering wired Internet access service via DSL and other facilities. The Wireline Broadband Classification Order based this decision on a finding that "providers of wireline broadband Internet access service offer subscribers the ability to run a variety of applications" that fit the definition of information services, including those that enable access to email and the ability to establish home pages. The Commission therefore concluded that "[w]ireline broadband Internet access service, like cable modem service, is a functionally integrated, finished service that inextricably intertwines information-processing capabilities with data transmission such that the consumer always uses them as a unitary

service." The Commission also eliminated the *Computer Inquiry* requirements for wireline Internet access service. In 2006, the Commission issued the *BPL-Enabled Broadband Order*, which extended the information service classification to Internet access service provided over power lines.

324. Subsequently, in 2007 the Commission released the Wireless Broadband Classification Order, which determined that wireless broadband Internet access service was likewise an information service under the Communications Act. The Wireless Broadband Classification Order also found that although "the transmission component of wireless broadband Internet access service is 'telecommunications' . . . the offering of the telecommunications transmission component as part of a functionally integrated Internet access service offering is not 'telecommunications service' under section 3 of the [Communications] Act.'

325. The Wireless Broadband Classification Order also considered the application of section 332 of Title III to wireless broadband Internet access service and concluded that "mobile wireless broadband Internet access service does not meet the definition of 'commercial mobile service' within the meaning of section 332 of the Act as implemented by the Commission's CMRS rules because such broadband service is not an 'interconnected service,' as defined in the Act and the Commission's rules."

326. In 2010, the D.C. Circuit rejected the Commission's attempt to enforce open Internet principles based on the Commission's Title I ancillary authority in Comcast v. FCC. Following Comcast, the Commission issued a Notice of Inquiry (Broadband Classification NOI) that sought comment on the appropriate approach to broadband policy in light of the D.C. Circuit's decision. Shortly thereafter, the Commission released the 2010 Open Internet Order. The 2010 Order was based in part on a revised understanding of the Commission's Title I authority-as well as a variety of other statutory provisions including section 706-and was again challenged before the D.C. Circuit in Verizon v. FCC. Although the Verizon court accepted the Commission's reinterpretation of section 706 as an independent grant of legislative authority over broadband services, the court nonetheless vacated the noblocking and antidiscrimination provisions of the Order as imposing de facto common carrier status on providers of broadband Internet access service in violation of the Commission's

classification of those services as information services. (The Court also found that that authority did not allow the Commission to subject information services or providers of private mobile services to treatment as common carriers.)

327. In response to the Verizon decision, the Commission released a Notice of Proposed Rulemaking (NPRM) seeking public input on the "best approach to protecting and promoting Internet openness." Among other things, the 2014 Open Internet NPRM asked for discussion of the proper legal authority on which to base open Internet rules. The Commission proposed to rely on section 706 of the Telecommunications Act of 1996, but at the same time stated that it would "seriously consider the use of Title II of the Communications Act as the basis for legal authority." The NPRM sought comment on the benefits of both section 706 and Title II, and emphasized its recognition that "both section 706 and Title II are viable solutions."

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 vet clear. Business relationships among cable operators and their service offerings are evolving." However, despite the rapidly changing market for broadband Internet access services, the Commission's decisions classifying broadband Internet access service are based largely on a factual record compiled over a decade ago, during this early evolutionary period. The 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 thirdparty 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. In this section, we reconsider the Commission's prior decisions that classified wired and wireless broadband Internet access service as information services, and 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. (A "telecommunications service" is "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." 47 U.S.C. 153(53). "Telecommunications" is "the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received." Id. 153(50).) 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. The Supreme Court summed up this principle in Brand X:

In *Chevron*, this Court held that ambiguities in statutes within an agency's jurisdiction to administer are delegations of authority to the agency to fill the statutory gap in reasonable fashion. Filling these gaps, the Court explained, involves difficult policy choices that agencies are better equipped to make than courts. If a statute is ambiguous, and the implementing agency's construction is reasonable, Chevron requires a federal court to accept the agency's construction of the statute, even if the agency's reading differs from what the court believes is the best statutory interpretation.

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. The Court upheld the Commission's prior information services classification because "the statute fails unambiguously to classify the telecommunications component of cable modem service as a distinct offering. This leaves federal telecommunications policy in this technical and complex area to be set by the Commission. . . . Where a term in the Act "admit[s] of two or more reasonable ordinary usages, the Commission's choice of one of them is entitled to deference." The Court concluded, given the "technical, complex, and dynamic" questions that the Commission resolved in the Cable Modem Declaratory Ruling, "[t]he Commission is in a far better position to address these questions than we are.'

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. Justice Thomas, writing for the majority, noted that "our conclusion that it is reasonable to read the Communications Act to classify cable modem service solely as an 'information service' leaves untouched Portland's holding that the Commission's interpretation is not the *best* reading of the statute." Justice Breyer concurred with Justice Thomas, stating that he "believe[d] that the Federal Communications Commission's decision f[e]ll[] within the scope of its statutorily delegated authority," although "perhaps just barely." And in dissent, Justice Scalia, joined by Justices Souter and Ginsburg, found that the Commission had adopted "an implausible reading of the statute" and that "the telecommunications component of cable-modem service retains such ample independent identity" that it could only reasonably be classified as a separate 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." Indeed, in *Brand X*, the Supreme Court, in the specific context of classifying cable modem service, instructed the Commission to reexamine its application of the Communications Act to this service "on a continuing basis": [I]f the agency adequately explains the reasons for a reversal of policy, "change is not invalidating, since the whole point of *Chevron* is to leave the discretion provided by the ambiguities of a statute with the implementing agency." "An initial agency interpretation is not instantly carved in stone. On the contrary, the agency . . . must consider varying interpretations and the wisdom of its policy on a continuing basis," for example, in response to changed factual circumstances, or a change in administrations. . . .

335. More recently, in FCC v. Fox *Television Stations, Inc.,* the Supreme Court emphasized that, although an agency must acknowledge that it is changing course when it adopts a new construction of an ambiguous statutory provision, "it need not demonstrate to a court's satisfaction that the reasons for the new policy are *better* than the reasons for the old one. . . ." Rather, it is sufficient that "the new policy is permissible under the statute, that there are good reasons for it, and that the agency believes it to be better, which the conscious change of course adequately indicates." We discuss in detail below why our conclusion that broadband Internet access service is a telecommunications service is well within our authority. Having determined that Congress gave the Commission authority to determine the appropriate classification of broadband Internet access service—and having provided sufficient justification of changed factual circumstances to warrant a reexamination of the Commission's prior classification—we find, upon interpreting the relevant statutory terms, that broadband Internet access service, as offered today, includes "telecommunications," and falls within the definition of a "telecommunications 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 (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. "Schools" would include institutions of higher education to the extent that they purchase these standardized retail services. See Higher Education and Libraries Comments at 11 (noting that institutions of higher education are not "residential customers" or "small businesses" and uncertainty about whether institutions of higher education (and their libraries) are included in the term "schools" because the term is sometimes

interpreted as applying only to K through 12 schools). For purposes of this definition, "mass market" also includes broadband Internet access service purchased with the support of the E-rate, and Rural Healthcare programs, as well as any broadband Internet access service offered using networks supported by the Connect America Fund (CAF), but does not include enterprise service offerings or special access services, which are typically offered to larger organizations through customized or individually negotiated arrangements.) 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. (As explained above, see supra note, our use of the term "broadband" in this Order includes but is not limited to services meeting the threshold for "advanced telecommunications capability.") This term also encompasses any service that the Commission finds to be providing a functional equivalent of the service described in the previous sentence. (The Verizon decision upheld the Commission's regulation of broadband Internet access service pursuant to section 706 and the definition of "broadband Internet access service" has remained part of the Commission's regulations since adopted in 2010. Certain parties have raised issues in the record regarding the regulatory status of mobile messaging services, e.g., SMS/ MMS. We note that the rules we adopt today prohibit broadband providers from, for example, blocking messaging services that are delivered over a broadband Internet access service. We decline to further address here arguments regarding the status of messaging within our regulatory framework, but instead plan to address these issues in the context of the pending proceeding considering a petition to clarify the regulatory status of text messaging services.)

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. (In classifying wireless broadband Internet access as an information service, the Commission excluded broadband provided via satellite from classification. Thus, our action here expressly classifies the service for the

first time. We observe that while our classification includes broadband Internet access services provided using capacity over fixed or mobile satellite or submarine cable landing facilities, our classification of these services as telecommunications services or CMRS does not require changes to the authorizations for satellite earth stations, satellite space stations, or submarine cable landing facilities.) 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 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. (The Commission has consistently determined that resellers of telecommunications services are telecommunications carriers, even if they do not own any facilities. Further, as the Supreme Court observed in Brand X, "the relevant definitions do not distinguish facilities-based and nonfacilities-based carriers.") "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. (We note that section 337(f)(1)of the Act excludes public safety services from the definition of mobile broadband Internet access service. 47 U.S.C. 337(f)(1).) The term also

encompasses mobile satellite broadband services.

338. In the Verizon opinion, the D.C. Circuit concluded that, in addition to the retail service provided to consumers, "broadband providers furnish a service to edge providers, thus undoubtedly functioning as edge providers 'carriers.'" It was because the court concluded that the Commission had treated this distinct service as common carriage, that it "remand[ed] the case to the Commission for further proceedings consistent with this opinion." We conclude now that the failure of the Commission's analysis was a failure to explain that the "service to edge providers" is subsumed within the promise made to the retail customer of the BIAS service. For the reasons we review herein, the reclassification of BIAS necessarily resolves the edgeprovider question as well. In other words, the 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 Verizon court implicitly followed that analysis when it treated the classification of the retail end user service as controlling with respect to its analysis of the edge service; its conclusion that an edge service could be not be treated as common carriage turned entirely on its understanding that the provision of retail broadband Internet access services had been classified as "information services." 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 thus decline to adopt proposals identifying and classifying a separate service provided to edge providers that were presented in the record, and on which we sought comment, including those by Mozilla, the Center for Democracy and Technology, and Professors Wu and Narechania. We believe that our actions here adequately address the concerns raised by these proposals, consistent with both law and fact.) 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. As discussed above, a broadband Internet access service provider's representation to its end-user customer that it will transport and deliver traffic to and from all or substantially all Internet endpoints necessarily includes the promise to transmit traffic to and from those Internet end points back to the user. Thus, the so-called "edge service" is secondary, and in support of, the promise made to the end user, and broadband provider practices with respect to edge providers—including terms and conditions for the transfer and delivery of traffic to (and from) the BIAS subscriber—impact the broadband provider's provision of the Title II broadband Internet access service. (This is not a novel arrangement. Under traditional contract principles, Party A (a broadband provider) can contract with Party B (a consumer) to provide services to Party C (an edge provider). That the service is being provided to Party C does not, in any way, conflict with the legal conclusion that the terms and conditions under which that service is being provided are governed by the agreement—and here the regulatory framework-between Parties A and B. Most content that flows across the broadband provider's "last-mile" network to the retail consumer does not involve a direct agreement between Parties B and C but, as the Verizon court observed, an edge provider, like Amazon, could enter into an agreement with a broadband provider, like Comcast.) 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. That is because the same data is flowing between end user and edge consumer. (This conclusion does not contradict the economic view that a broadband provider is operating in a two-sided market. See, e.g., supra note. A newspaper looks the same whether viewed by an advertiser or a subscriber, even though their economic relationship with the newspaper publisher is

different. Here the operation of the broadband Internet access service is so intertwined with the edge service so as to compel the conclusion that the BIAS reclassification controls any service that is being provided to an edge provider.) In other words, to the extent that it is necessary to examine a separate edge service, that service is simply derivative of BIAS, constitutes the same traffic, and, in any event, fits comfortably within the command that practices provided "in connection with" a Title II service that must themselves be just and reasonable.

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. The Commission has historically distinguished these services from "mass market" services and, as explained in the 2014 Open Internet NPRM, they "do not provide the capability to transmit data to and receive data from all or substantially all Internet endpoints." (In classifying broadband Internet access service as a telecommunications service today, the Commission does not, and need not, reach the question of whether and how these services are classified under the Communications Act.) We do not disturb that finding here. Finally, we observe that to the extent that coffee shops, bookstores, airlines, private enduser 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. Likewise, when a user employs, for example, a wireless router or a Wi-Fi hotspot to create a personal Wi-Fi network that is not intentionally offered for the benefit of others, he or she is not offering a broadband Internet access service, under our definition, because the user is not marketing and selling such service to residential customers. small business, and other end-user customers such as schools and libraries.

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

341. We begin our analysis by examining how broadband Internet access service was and currently is offered. 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." Despite the rapidly changing market for broadband Internet access services, the Commission's decisions classifying broadband Internet access service are based largely on a factual record compiled over a decade ago, during this early evolutionary period. The 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.

342. In the past, the Commission has identified a number of ways to determine what broadband providers "offer" consumers. In the Cable Modem Declaratory Ruling, for example, the Commission concluded that "the classification of cable modem service turns on the *nature of the functions* that the end user is offered." In the Wireline Broadband Classification Order, the Commission noted that "whether a telecommunications service is being provided turns on what the entity is 'offering . . . to the public,' and customers' understanding of that service." In the Wireless Broadband Classification Order, the Commission stated that "[a]s with both cable and wireline Internet access, [the] definition appropriately focuses on the end user's experience, factoring in both the functional characteristics and speed of transmission associated with the service." Similarly, in Brand X, both the majority and dissenting opinions examined how consumers perceive and use cable modem service, technical characteristics of the services and how it is provided, and analogies to other services.

a. Broadband Internet Access Services at Time of Classification

343. "Wired" Broadband Services. The Commission's Cable Modem Declaratory Ruling described cable modem service as "typically includ[ing] many and sometimes all of the functions made available through dial-up Internet access service, including content, email accounts, access to news groups, the ability to create a personal Web page, and the ability to retrieve information from the Internet, including access to the World Wide Web." The Commission also identified functions provided with cable modem service that it called "Internet connectivity functions." (Earlier, in its 2001 AOL/Time Warner

merger order describing the emerging high speed Internet access services offered through cable modems, the Commission found that "Internet access services consist principally of connectivity to the Internet provided to end users.") These included establishing a physical connection to the Internet and interconnecting with the Internet backbone, protocol conversion, Internet Protocol address number assignment, domain name resolution through DNS, network security, caching, network monitoring, capacity engineering and management, fault management, and troubleshooting. In addition, the Commission noted that "[n]etwork monitoring, capacity engineering and management, fault management, and troubleshooting are Internet access service functions that serve to provide a steady and accurate flow of information between the cable system to which the subscriber is connected and the Internet." The Ruling noted that "[c]omplementing the Internet access functions are Internet applications provided through cable modem service. These applications include traditional ISP services such as email, access to online newsgroups, and creating or obtaining and aggregating content. The cable modem service provider will also typically offer subscribers a 'first screen' or 'home page' and the ability to create a personal Web page." The Commission explained that ''[e]-mail, newsgroups, the ability for the user to create a Web page that is accessible by other Internet users, and DNS are *applications* that are commonly associated with Internet access service,' and that "[t]aken together, they constitute an information service." In the Wireline Broadband Classification Order, the Commission found that end users subscribing to wireline broadband Internet access service "expect to receive (and pay for) a finished, functionally integrated service that provides access to the Internet."

¹ 344. The Commission's subsequent wired broadband classification decisions did not describe wired broadband Internet access services with any greater detail.

345. Wireless Broadband Services. In 2007, the Commission described wireless broadband Internet access service as a service "that uses spectrum, wireless facilities and wireless technologies to provide subscribers with high-speed (broadband) Internet access capabilities." The Commission noted that "many of the mobile telephone carriers that provide mobile wireless broadband service for mobile handsets offer a range of IP-based multimedia content and services—including ring tones, music, games, video clips and video streaming—that are specially designed to work with the small screens and limited keypads of mobile handsets. This content is typically sold through a carrier-branded, carrier-controlled portal."

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. (In addition, the mobile residential figures may overstate residential handsets because mobile filers report the number of "consumer" handsets that are not billed to a corporate, noncorporate business, government, or institutional customer account, and thus could include handsets for which the subscriber is reimbursed by their employee.) 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. This widespread penetration of broadband Internet access service has led to the development of third-party services and devices and has increased the modular way consumers have come to use them. As 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. Consumers' appetite for third-party services has also received a boost from the shift from dial-up to broadband, as a high-speed connection makes the Internet much more useful to consumers. (For example, early studies showed that broadband users are far more likely than dial-up users to go online to seek out news, look for travel information, share computer files with others, create content, and download games and videos.) The impact of broadband on consumers' demand for third-party services is evident in the explosive growth of online content and application providers. In early 2003, a year after the Cable Modem Declaratory Ruling, there were approximately 36 million Web sites. 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 email, 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 email. Today, broadband service providers still provide various Internet applications, including email, 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.

348. For example, companies such as Google and Yahoo! offer popular alternatives to the email services provided to subscribers as part of broadband Internet access service packages. According to Experian, Gmail and Yahoo! Mail were among the ten Internet sites most frequently visited during the week of January 17, 2015, with approximately 400 million and 350 million visits respectively. Some parties

even advise consumers specifically not to use a broadband provider-based email address; because a consumer cannot take that email address with them if he or she switches providers, some assert that using a broadband providerprovided email address results in a disincentive to switch to a competitive provider due to the attendant difficulties in changing an email address. Third-party alternatives are also widely available for other services that may be provided along with broadband Internet access service. (DNS, caching, and other services that enable the efficient transmission of data over broadband connections are considered in section IV.C.3. below.) For example, firms such as Apple, Dropbox, and Carbonite provide "cloudbased" storage; services like Go Daddy provide Web site hosting; users rely on companies such as WordPress and Tumblr to provide blog hosting; and firms such as Netvibes and Yahoo! provide personalized homepages. GigaNews and Google provide access to newsgroups, while many broadband providers have themselves ceased offering this service entirely.

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. In this regard, perhaps the most significant trend is the growing popularity of third-party video streaming services. By one estimate, Netflix and YouTube alone account for 50 percent of peak Internet download traffic in North America. Other sites among the most popular in the United States include the search engines Google and Yahoo!; social networking sites Facebook and LinkedIn; e-commerce sites Amazon, eBay and Craigslist; the user-generated reference site Wikipedia; a diverse array of user-generated media sites including Reddit, Twitter, and Pinterest; and news sources such as nytimes.com and CNN.com. Overall, broadband providers themselves operate very few of the Web sites 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. As the Center for Democracy & Technology puts it, "[t]he service that broadband providers offer to the public is widely understood today, by both the providers and their customers, as the ability to connect to anywhere on the

Internet-to any of the millions of Internet endpoints-for whatever purposes the user may choose." (CDT contrasts the current state of affairs with an earlier time "when Internet access service providers sought to differentiate themselves by offering 'walled gardens' of proprietary content and users looked to their access provider to serve as a kind of curator of the chaos of the Internet.") 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. Commenters cite numerous examples of advertisements that emphasize transmission speed as the predominant feature that characterizes broadband Internet access service offerings. For example, Comcast advertises that its XFINITY Internet service offers "the consistently fast speeds you need, even during peak hours," and RCN markets its high-speed Internet service as providing the ability "to upload and download in a flash." Verizon claims that "[w]hatever your life demands, there's a Verizon FiOS plan with the perfect upload/download speed for you," while the name of Verizon's DSLbased service is simply "High Speed Internet." Furthermore, fixed broadband providers use transmission speeds to classify tiers of service offerings and to distinguish their offerings from those of competitors. AT&T U-Verse, for instance, offers four "Internet Package[s]" at different price points, differentiated in terms of the "Downstream Speeds" they provide. Verizon meanwhile asserts that "the 100% fiber-optic network that powers FiOS" enables "a level of speed and capacity that cable can't always compete with—especially when it comes to upload speeds." On the mobile side, mobile broadband providers similarly emphasize transmission speed as well as reliability and coverage as factors that characterize their mobile broadband Internet access service offering. AT&T, for example, claims that it has the "[n]ation's most reliable 4G LTE network" and that what 4G LTE means is "speeds up to 10x faster than 3G." Sprint advertises its "Sprint Spark" service as having its "fastest ever data speeds and stronger in-building signal."

352. The advertisements discussed above link higher transmission speeds

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and service reliability with enhanced access to the Internet at large-to any 'points'' a user may wish to reach—not only to Internet-based applications or services that are provided in conjunction with broadband access. RCN, for instance, claims that its "110 Mbps High-Speed Internet" offering is "ideal for watching Netflix," a thirdparty video streaming service. Verizon claims that FiOS's ''75/75 Mbps'' speed "works well for uploading and sharing videos on YouTube and serious multiuser gaming" presumably by using the FiOS service to access any combination of third-party and Verizon-affiliated content and services the user chooses. AT&T notes that its 4G LTE service "lets you stream clear, crisp video faster than ever before, download songs in a few beats, apps almost instantly, and so much more." Broadband providers also market access to the Internet through Wi-Fi. Comcast, for example, notes that with its XFinity Internet services, subscribers can enjoy "access to millions of hotspots nationwide and stay connected while away from home." T-Mobile advertises the ability to place calls and send messages over 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. AT&T U-Verse, for instance, offers four "Internet Package[s]" at different price points, differentiated in terms of the "Downstream Speeds" they provide. 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 marketing materials discussed here also indicate that broadband providers hold themselves out indifferently to the public when offering broadband Internet access service. Within particular service areas, broadband providers tend to offer uniform prices and services to potential customers. As discussed above, these offers are widely available through advertisements and marketing materials.) 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

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." 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." 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.

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. For the reasons discussed above, we 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 the Internet' and other

'applications and functions.'" Although broadband providers in many cases provide broadband Internet access service along with information services, such as email and online storage, we find that broadband Internet access service is today sufficiently independent of these information services that it is a separate "offering." We also find that domain name service (DNS) (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.) and caching, (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 Web sites that subscribers wish to see most often.) when provided with broadband Internet access services, fit squarely within the telecommunications systems management exception to the definition of "information service." (Hereinafter, we refer to this exception as the "telecommunications systems management" exception.) Thus, when provided with broadband Internet access services, these integrated services do not convert broadband Internet access service into an information service. (One of the dissenting statements asserts that Congress could not have delegated to the Commission the authority to determine whether broadband Internet access service is a telecommunications service because "[h]ad Internet access service been a basic service, dominant carriers could have offered it (and all related computer-processing functionality) outside the parameters of the *Computer* Inquiries," but "I cannot find a single suggestion that anyone in Congress, anyone at the FCC, anyone in the courts, or anyone at all thought this was the law during the passage of the Telecommunications Act" in 1996. See Pai Dissent at 37. We disagree with this line of reasoning. First, it contradicts the Supreme Court's 2005 holding in *Brand X*, where the 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. Second, and underscoring the ambiguity that the Brand X court identified in finding that the Commission had *Chevron* deference in its classification of broadband Internet access service, the dissenting statement fails to identify any

compelling evidence that Congress thought broadband Internet access service was 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, "[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." Above, we more than adequately explain our changed view of the facts and circumstances in the market for broadband Internet access services which is evident from consumers' heavy reliance on third-party services and broadband Internet access providers' emphasis on speed and reliability of transmission separately from and over the extra features of the service packages they offer. Furthermore, our understanding of the facts of how the elements of broadband Internet access service work has not changed. No one has ever disputed what DNS is or how it works. The issue is whether it falls within the definition of "information service" or the telecommunications systems management exception. If the latter, as we find below, prior factual findings that DNS was inextricably intertwined with the transmission feature of cable modem service do not

provide support for the conclusion that cable modem service is an integrated information service.

359. Moreover, opponents' reading of *Brand X* ignores the reasoning and holding of the Court's opinion overall. As discussed above, the *Brand X* opinion confirms that the Supreme Court viewed the statutory classification of cable modem service as a judgment call for the Commission to make. If the Commission had concluded that the transmission component of cable modem service was a telecommunications service, and provided a reasoned explanation for its decision, it is evident that the Court would have deferred to that finding.

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. Moreover, the regulatory history regarding the classification of broadband Internet access service would not provide a reasonable basis for assuming that the service would receive sustained treatment as an information service in any event. As noted above, the 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 first formal ruling on the classification of broadband Internet access service came from the Ninth Circuit in 2000, which held that the best reading of the relevant statutory definitions was that cable modem service in fact includes a telecommunications service. The Cable Modem Declaratory Ruling was expressly limited to cable modem service "as it [was] currently offered." The lawfulness of the Commission's 2002 Cable Modem Declaratory Ruling remained unsettled until the Supreme Court affirmed it in 2005, and the Commission's Wireline Broadband Classification Order was not affirmed until two years later, in 2007. In 2010, the Commission sought comment on reclassifying broadband Internet access services, and sought to refresh the record again in 2014. While the Commission did classify wireless broadband Internet access service as an

information service in 2007, the Comcast and Verizon decisions, in 2009 and 2014 respectively, called into doubt the Commission's ability to rely upon its Title I ancillary authority to protect the public interest and carry out its statutory duties to promote broadband investment and deployment. The legal status of the information service classification thus 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. We thus reject the claims that our action here unlawfully upsets reasonable reliance interests. In any event, we provide in this ruling a compelling explanation of why changes in the marketing, pricing, and sale of broadband Internet access service, as well as the technical characteristics of how the service is offered, now justify a revised classification of the service. (In response to arguments raised in the dissenting statements, we clarify that, even assuming, arguendo, that the facts regarding how BIAS is offered had not changed, in now applying the Act's definitions to these facts, we find that the provision of BIAS is best understood as a telecommunications service, as discussed below, see infra sections IV.C.3.b., IV.C.3.c., and disavow our prior interpretations to the extent they held otherwise.)

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. As discussed above, 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." It 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. (For example, in transmissions from the user to an edge provider, a user either directly specifies the domain name of the edge provider or utilizes a search engine to determine the domain name. The application that a user chooses then uses DNS to translate the domain name into an IP address associated with the edge provider, which is placed into the packet as its destination. For transmissions from an edge provider to a user, the edge provider places the user's IP address into the packet as the destination IP address.) Consumers would be quite upset if their Internet communications did not make it to their intended recipients or the Web site addresses they entered into their browser would take them to unexpected Web pages. Likewise, numerous forms of telephone service qualify as telecommunications even though the consumer typically does not know the geographic location of the called party. These include, for example, cell phone service, toll free 800 service, and call bridging service. In all of these cases, the user specifies the desired endpoint of the communication by entering the telephone number or, in the case of broadband Internet access service, the name or address of the desired Web site or application. More generally, we have never understood the definition of "telecommunications" to require that users specify-or even knowinformation about the routing or handling of their transmissions along the path to the end point, nor do we do so now. Further, that there is not a oneto-one correspondence between IP addresses and domain names, and that DNS often routes the same domain name to different locations based on its inference of which location is most likely to be the one the end user wants, does not alter this analysis. It is not uncommon in the toll-free arena for a single number to route to multiple locations, and such a circumstance does

not transform that service to something other than telecommunications.

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. 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." (A BIAS provider, when utilizing the Internet Protocol, may fragment packets into multiple pieces. However, such fragmentation does not change the form or content, as the pieces are reassembled before the packet is handed over to the application at the destination.) 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." (For example, when a person sends an email, he or she expects that the content of the email, and any attachments, to be delivered to the recipient unaltered in content or form. We note that a user may choose to use an application, such as email, that is a separate information service offered by the BIAS provider. When this occurs, the provider of the information service may place information into the packet payload that changes the form or content. However, this change in form or content is purely implemented as part of the separable information service. The broadband provider, in transmitting the packet via BIAS, does not alter the form or content of the packet payload.)

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." We find that broadband Internet access service providers offer broadband Internet access service "directly to the public." As discussed above, the record indicates that broadband providers routinely market broadband Internet access services widely and to the general public. Because a 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-bycarrier 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. (To the extent our prior precedents might suggest otherwise, we disavow such an interpretation in this context.)

364. In addition, the implied promise to make arrangements for exchange of Internet traffic as part of the offering of broadband Internet access service does not constitute a private carriage arrangement. (Commission precedent "holds that a carrier will not be a common carrier 'where its practice is to make individualized decisions in particular cases whether and on what terms to serve.' '') First, in offering broadband Internet access service to its end-user customers, the broadband provider has voluntarily undertaken an obligation to arrange to transfer that traffic on and off its network. Broadband 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. Merely asserting that the traffic exchange component of the service may have some individualized negotiation does not alter the nature of the underlying service. Second, the record reflects that broadband providers assert that multiple routes to reach their networks are widely and readily available. They cannot, at the same time, assert that all arrangements for delivering traffic to their end-user subscribers are

individually negotiated with every edge provider. Third, the record reflects that the majority of arrangements for traffic exchange are informal handshake agreements without formalized terms and conditions that would indicate any kind of individualized negotiations. 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. As discussed above, it must necessarily do so, in order to offer and provide its broadband Internet access service. Further, we note that these types of individualized negotiations are analogous to other telecommunications providers whose customer service representatives may offer variable terms and conditions to customers in circumstances where the customer threatens to switch service providers. We therefore find that the implied representation that broadband Internet access service providers will arrange for transport of traffic on and off their networks as part of the BIAS offering does not constitute private carriage. As such, we find that broadband Internet access service is offered "directly to the public," and falls within the definition of "telecommunications service." (If an offering meets the definition of telecommunications service, then the service is also necessarily a common carrier service.)

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." 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 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 thirdparty'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. (The definition of "information service" has since been moved from subsection 20 to subsection 24 of section 3 but has not itself been revised. The telecommunications systems management exception in section 3(24) provides that the term "information service" "does not include" the use of any data processing, storage, retrieval or similar capabilities "for the management, control, or operation of a telecommunications system or the management of a telecommunications service.") Thus, in his view, such functions cannot be relied upon to convert what otherwise would be a telecommunications service into an information service. Therefore, consideration of whether DNS service falls within the telecommunications systems management exception could have been determinative in the Court's outcome in Brand X, had it considered the question.

367. Although the Commission assumed in the *Cable Modem*

Declaratory Ruling-sub silentio-that DNS fell outside 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.) 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. (Throughout the history of computerbased communication, Title II covered more than just the simple transmission of data. Some features and services that met the literal definition of "enhanced service," but did not alter the fundamental character of the associated basic transmission service, were considered "adjunct-to-basic" and treated as basic (i.e., telecommunications) services even though they went beyond mere transmission. Thus, the Commission's definition of "basic services" (the regulatory predecessor to "telecommunications services") includes, among other things, those intelligent features that run the network or improve its usefulness to consumers, such as a carrier's use of "companding [compressing/expanding] techniques, bandwidth compression techniques, circuit switching, message or packet switching, error control techniques, etc. that facilitate economical, reliable movement of information does not alter the nature of the basic service." Basic service can also include "memory or storage within the network . . . used only to facilitate the transmission of the information from the origination to its destination,") 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 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. (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.)

368. Citing language from a staff decision to the effect that adjunct-tobasic functions do not include functions that are "useful to end users, rather than carriers," 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. The particular function at issue in the cited staff decision-the "storage and retrieval of information that emergency service personnel use to respond to E911 calls"—was not instrumental in placing calls or managing the communications network, but simply allowed certain telecommunications consumers (E911 answering centers and first responders) to identify the *physical location* of the distressed caller in order to render assistance, a benefit to be sure, but one unrelated to telecommunications. By contrast, DNS-like the speed dialing, call forwarding, and computer-provided directory assistance functions that already have been definitively classified as falling within the telecommunications systems management exception to section 3(24)—allows more efficient use of the telecommunications network by facilitating accurate and efficient routing from the end user to the receiving party. (Notwithstanding the close resemblance between DNS and these features that the Commission previously has found to be within the telecommunications systems management exception, USTelecom contends that "DNS does not manage or

control a telecommunications system or a telecommunications service.' USTelecom Reply at 32. As with call forwarding, speed dialing, and computer-provided directory assistance, however. DNS manages the network in the sense of facilitating efficient routing and call completion. In any event, even if DNS were not viewed as facilitating network management, it clearly would fall within the exception as a capability used for the "operation of a telecommunications system." 47 U.S.C. 153(24). Responding to assertions in one of the dissenting statements, (Pai Dissent at 36 through 37), we expressly find this rationale applies equally to other services that arguably serve the interests of subscribers, such as, for example, caching. While these services do provide a benefit to subscribers in the form of faster, more efficient service, they also serve to manage the network by facilitating efficient retrieval of requested information, reducing a broadband provider's costs in the provision of the service. In addition, caching and other services which provide a benefit to subscribers, like DNS, also serve as a capability used for the operation of a telecommunications system by enabling the efficient retrieval of information.)

369. AT&T's other arguments regarding DNS also fail. Contrary to its suggestion, the fact that the analogous speed dialing, call forwarding, and computer-provided directory assistance functions that the Commission has designated as falling within the telecommunications systems management exception were adjunct to "legacy telephone ('basic') services" rather than to "Internet-based services" provides no basis to discard the logic of that analysis in the broadband context. Nor are we persuaded by AT&T's observation that DNS systems provide additional "reverse look-up" functions (*i.e.*, converting a numeric IP address into a domain name) that are "analogous to (though far more sophisticated than) 'reverse directory assistance' '' services that were deemed to be enhanced services in the legacy circuit-switched telephone service environment. Even assuming, arguendo, that such "reverse look-up" functions were analogous, we do not believe that the inclusion of such functionality would convert what was otherwise a telecommunications service into an information service. As the Supreme Court recognized, an entity may not avoid Title II regulation of its telecommunications service simply by packaging that service with an information service. As the Court explained, "a telephone company that

packages voice mail with telephone service offers a transparent transmission path-telephone service-that transmits information independent of the information-storage capabilities provided by voice mail. For instance, when a person makes a telephone call, his ability to convey and receive information using the call is only trivially affected by the additional voice-mail capability." Likewise, we find that to the extent a DNS "reverse look-up" functionality is included with the offering of broadband Internet access service, the service itself-the transmission of data to and from all or substantially all Internet endpoints-is only trivially dependent on, if at all, the "reverse look-up" function cited by AT&T. We find that this analysis applies equally to the DNS "assist capabilities" cited by AT&T, in which the provider's DNS functionality may also be used occasionally to guess what a user meant when she mistyped an address. (In the context of voice telephone service, the Commission has recognized that the availability of reverse directory capability does not transform that service from a telecommunications service into an information service.)

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 their broadband providers to provide DNS lookup, the record indicates that third-party-provided-DNS is now widely available, (To be clear, we do not find that DNS is a telecommunications service (or part of one) when provided on a stand-alone basis by entities other than the provider of Internet access service. In such instances, there would be no telecommunications service to which DNS is adjunct, and the storage

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functions associated with stand-alone DNS would likely render it an information service.) and the availability of the service from third parties cuts against a finding that Internet transmission and DNS are inextricably intertwined, whether or not they were at the time of the Commission's earlier classification decisions. In any event, the fact that DNS may be offered by a provider of broadband Internet access service does not affect our conclusion that the telecommunications is offered directly to the public.

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. (We also observe that add-on services to DNS, such as DNS security extensions, do not convert BIAS into an information service. DNS security extensions provide authentication that the messages sent between DNS servers, and between a DNS server and a DNS client, are not altered. As such, DNS security extensions facilitate accurate DNS information, and, like DNS itself, are incidental to BIAS, and do not alter the fundamental character of BIAS. We accordingly disagree with the contrary interpretation of the role of DNS security extensions described in one of the dissenting statements.) 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. In the Cable Modem Declaratory Ruling. the Commission described caching as "the storing of copies of content at locations in the network closer to subscribers than their original sources." While the Commission noted the caching function in the Cable Modem Declaratory Ruling, it did not rely on the caching function (as opposed to the DNS capability) as a basis for its classification determination. (To the extent that Brand X can be read as reaching a different conclusion, we find the Court's characterization of

"caching" as enabling "subscribers [to] reach third-party Web sites via the World Wide Web, and browse their contents, [only] because their service provider offers the capability for . . acquiring, [storing] . . . retrieving [and] utilizing information" to be technically inaccurate.) 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. (Caching is akin to a "store and forward technology [used] in routing messages through the network as part of a basic service.") 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. (Third party "content delivery networks" provide extensive caching services. *See* Akamai Comments at 3 (explaining that it deploys its technologies deep in the networks of last-mile broadband Internet providers and caches content locally, and stating that it has deployed approximately 150,000 servers in thousands of locations inside over 1,200 global networks located in over 650 cities and 92 countries))

373. Other Features Within the Telecommunications Systems Management Exception. Opponents raise, as well, a variety of new networkoriented, security-related computer processing capabilities that are used to address broader threats to their broadband networks and customers, including the processing of Internet traffic to check for worms and viruses and features that block access to certain Web sites. They claim that, as with DNS, a consumer cannot utilize the service without also receiving many of these security mechanisms. Whether or not a consumer necessarily must utilize security-related blocking functions when using a provider's broadband Internet access service, we find that, like DNS and caching, such capabilities provide telecommunications systems management functions that do not transform what otherwise would be a telecommunications service into an information service. Some security functions, *e.g.*, blocking denial of

service attacks, fall within the telecommunications systems management exception because they are used exclusively for the management, control, or operation of the telecommunications system. Many such network security functions are analogs of outbound and inbound "call blocking" services, such as those blocking calls to 900 and 976 numbers and those blocking calls from telemarketers, that have always been considered adjunct-to-basic with respect to voice telephony. Other security functions-firewalls and parental controls, for example—either fall within the telecommunications systems management exception because they are used exclusively for management of the telecommunication service or are separable information services that are offered by providers other than providers of broadband Internet access service. Such security features simply filter out unwanted traffic, and do not alter the fundamental character of the underlying telecommunications service offered to users. All of these functions ensure that users can use other Internet applications and services without worrying about interference from third parties.

374. CTIA contends that the integration between transmission and processing that characterizes mobile broadband Internet access service requires that it be classified as an information service, and notes that such integration is essential "whether a user is browsing a Web site, engaged in mobile video conferencing, or undertaking any of the myriad other activities made possible by mobile broadband." We find that that, rather than transforming what otherwise would be a telecommunications service into an information service, the functions CTIA describes fall within the telecommunications management exception because they serve to facilitate the transmission of information and allow mobile subscribers to make use of other Internet applications and services. Other commenters contend that broadband providers' assignment of Internet Protocol (IP) addresses is also an information service that renders broadband Internet access service an information service. We disagree. IP address assignment is akin to telephone number assignment, making a user's computer locatable by other users on the network. Thus, this function serves to enable the transmission of information for the use of other services. The fact that the end user's equipment must periodically obtain an IP address from

the broadband provider's server does not change the fundamental purpose of the service. It is analogous to adjunct-tobasic services that the Commission has held fall squarely within the telecommunications systems management exception.

375. Finally, Comcast asserts that "with the rise of IPv6 as the eventual replacement for IPv4 as the protocol for identifying and routing Internet content, Comcast and other [providers] also now provide the functionality necessary to transform an IPv4 address into an IPv6 address (and vice versa)," a "processing function" it claims is "part and parcel of broadband Internet access service.' We conclude that, as with DNS functions, the IP conversion functionality is akin to traditional adjunct-to-basic services, which fall under the telecommunications systems management exception. As discussed above, such functions must be "incidental" to an underlying telecommunications service, and must not alter the fundamental character of the telecommunications service. We find that the conversion of IPv4 to IPv6 and vice versa does not alter the information being transmitted, but rather enables the transmission of the information, analogous to traditional voice telephone calls to toll free numbers, pay-per-call numbers, and ported telephone numbers that 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. As with these traditional services, the inclusion of this functionality does not somehow convert the basic telecommunications service offering into an information service.

376. Broadband Internet Access Service Is Not Inextricably Intertwined With Add-On Information Services. Some commenters contend that broadband Internet access service must be a functionally integrated information service because it is offered in conjunction with information services, such as cloud-based storage services, email, and spam protection. We find that such services are not inextricably intertwined with broadband transmission service, but rather are a "product of the [provider's] marketing decision not to offer the two separately." The transmission service provided by broadband providers is functionally distinguishable from the Internet application add-ons they provide. Service providers cannot avoid the scope of Title II merely by bundling broadband Internet access service with information services. As the Supreme Court majority in *Brand X* recognized,

citing the *Stevens Report*, "a company 'cannot escape Title II regulation'" of a telecommunications service "'simply by packaging that service with voice mail'" or similar information services.

377. We find that these services identified in the record—email, cloudbased storage, and spam protection-are separable information services. We conclude that email accounts and cloudbased storage provided along with broadband Internet access services are akin to voicemail services offered along with traditional telephone service. As the Court found, "a telephone company that packages voice mail with telephone service offers a transparent transmission path—telephone service—that transmits information independent of the information-storage capabilities provided by voicemail [W]hen a person makes a telephone call, his ability to convey and receive information using the call is only trivially affected by the additional voice-mail capability." Likewise, the broadband Internet access service that consumers purchase is only trivially affected, if at all, by the email and cloud-based storage functionalities that broadband providers may offer with broadband Internet access service. Finally, security functions such as spam blocking are add-ons to separable information services such as email, and are themselves separable information services.

378. It is also notable that engineers view the Internet in terms of network "layers" that perform distinct functions. Each network layer provides services to the layer above it. Thus the lower layers, including those that provide transmission and routing of packets, do not rely on the services provided by the higher layers. In particular, the transmission of information of a user's choosing (which is a service offered by lower layers) does not depend on addon information services such as cloudbased storage services, email, or spam protection (which are services offered at the application layer). Also, application layer services that fall within the telecommunications management exception (e.g., DNS, caching, or security services offered as part of broadband Internet access service) similarly do not depend on add-on information services. As such, add-on information services are separated from the functions, like DNS, that facilitate transmission, and are not "inextricably intertwined" with broadband Internet access services.

379. Other recent developments also show that consumers' use of today's Internet to access content and applications is not inextricably

intertwined with the underlying transmission component. For instance, consumers are increasingly accessing content and applications on the Internet using Wi-Fi-only devices that take advantage of Wi-Fi hotspots not provided by the consumer's underlying broadband service provider. Similarly, consumers can sometimes use Wi-Fienabled smartphones not only to access the Internet via their service provider's mobile broadband network or Wi-Fi hotspots, but also using Wi-Fi hotspots offered by premises operators. Further, many consumers purchase content that can be accessed over any of a number of different transmission paths and devices over the Internet—for example, video over a fixed broadband connection to a flat-screen television, or over a Wi-Fi router connected to a fixed broadband connection to a tablet, or over a mobile broadband network to a smartphone.

380. In addition, countless third parties are now embedding electronics, software, sensors, and other forms of connectivity into a wide variety of everyday devices, such as wearables, appliances, thermostats, and parking meters that rely on Internet connectivity to provide value to the American consumer, including through mHealth, Smart Grid, connected education, and other initiatives. The growth of the Internet of Things is yet another clear indication that devices and services that consumers use with today's Internet are not inextricably intertwined with the underlying transmission component.

381. Finally, we observe that the Commission itself recognized in 2005 that the "link" between the transmission element of broadband Internet access service and the information service was not inextricable. Specifically, the 2005 Wireline Broadband Classification *Order* granted wireline broadband providers the option of offering the transmission component of broadband Internet access as a distinct common carrier service under Title II on a permissive basis, and a large number of rural carriers have exercised this option for nearly a decade. As NTCA explains, "[t]he fact that the Commission recognized as far back as 2005 that the transmission component *could* be separated out, and the fact that it has been separated out and offered separately on a tariffed basis by a large number of carriers undercuts any argument" that the transmission service and the services that ride atop that service are inextricably intertwined. Further, the 2007 Wireless Broadband Classification Order permitted providers of mobile broadband Internet access

service to offer the "transmission component [of wireless broadband Internet access service] as a telecommunications service.

d. Opponents' Remaining Challenges Are Insubstantial

382. Some commenters contend that our ruling is contrary to a Congressional intent for keeping the Internet unregulated. We are not, however, regulating the Internet, per se, or any Internet applications or content. Rather, our reclassification of broadband Internet access service involves only the transmission component of Internet access service. As the D.C. Circuit has explained, "Congress did not choose between" competing "market-based" and "common-carrier, equal access" philosophies for broadband regulation; rather, "the FCC possesses significant, albeit not unfettered, authority and discretion to settle on the best regulatory or deregulatory approach to broadband—a statutory reality that assumes great importance when parties implore courts to overrule FCC decisions on this topic." We recognize that the Commission's previous classification decisions concluded that classifying broadband Internet access service as an information service would "establish a minimal regulatory environment" that would promote the Commission's goal of "ubiquitous availability of broadband to all Americans." We do not today abandon that goal but instead seek to promote it through a "light-touch" regulatory framework for broadband Internet access services under Title II. As noted earlier, there will be no rate regulation, no unbundling of last-mile facilities, no tariffing, and a carefully tailored application of only those Title II provisions found to directly further the public interest in an open Internet.

383. Several commenters argue that we should rely exclusively on industry self-regulation to promote the policies discussed above. While we applaud voluntary industry initiatives, we find the self-regulation option to be lacking in a number of respects. First, for the reasons discussed in our forbearance analysis in section IV, we find that applying the few provisions in Title II necessary to implement the policy objectives identified above is in the public interest. We conclude that in the absence of credible Commission authority to step in when necessary in the public interest, voluntary measures will prove inadequate. Second, even the best-intentioned voluntary regulation initiatives are more likely to protect consumers when there is an expert agency that can provide a backstop to

inadequate industry action that may result from collective action or coordination problems beyond any single firm's control.

384. Other commenters argue that classifying broadband Internet access service as a telecommunications service would impermissibly compel providers of broadband Internet access service to operate as common carriers. This argument misconstrues the nature of our ruling. Our decision to classify broadband Internet access service as a telecommunications service subject to the requirements of Title II derives from the characteristics of this service as it exists and is offered today. We do not "require" that any service "be offered on a common carriage basis," but rather identify an existing service that is appropriately offered on a common carriage basis "by virtue of its functions," as explained in detail above. Our classification decision is easily distinguished from the rules struck down in *Midwest Video II*, as those rules impermissibly attached common carrier obligations to services the Commission plainly lacked statutory authority to regulate in this manner. Congress has not spoken directly to the regulatory treatment of broadband Internet access services. Our classification of these services as telecommunications services is a permissible exercise of our delegated authority, one which we have adequately justified and defended based on the record before us. Because we have appropriately classified these services as telecommunications services, we do not run afoul of the Act's provision that a

"telecommunications carrier shall be treated as a common carrier under this Act only to the extent that it is engaged in providing telecommunications services." We thus reject the argument that our ruling impermissibly compels common carriage.

385. Commenters also argue that the classification of broadband Internet access service as a telecommunications service results in this service being classified as both a telecommunications service and an information service, in violation of Congressional intent. We agree with commenters that these are best construed as mutually exclusive categories, and our classification ruling appropriately keeps them distinct. In classifying broadband Internet access service as a telecommunications service, we conclude that this service is not a functionally integrated information service consisting of a telecommunications component "inextricably intertwined" with information service components. Rather, we conclude, for the reasons explained

above, that broadband Internet access service as it is offered and provided today is a distinct offering of telecommunications and that it is not an information service. As further explained above, any functional integration of DNS or caching with broadband Internet access service does not disrupt this classification, as both of those functions fall within the "telecommunications systems management exception" to the definition of an information service. Nor does the mere "packaging" of information services such as email with broadband Internet access service convert the latter into an information service. Our classification of broadband Internet access service therefore does not create any definitional inconsistency.

386. We also reject the argument that the classification of broadband Internet access service as an information service is implicit in the definition of "interactive computer service" set forth in section 230 of the Communications Act, a provision focused on the blocking and screening of offensive material. We find it unlikely that Congress would attempt to settle the regulatory status of broadband Internet access services in such an oblique and indirect manner, especially given the opportunity to do so when it adopted the Telecommunications Act of 1996. At any rate, the definition does not expressly classify broadband Internet access service, as we define that term herein, as an information service. (For one thing, the phrase "any information service, system or access software provider", see 47 U.S.C. 230 (f), may be broader in scope than the term "information service" as defined in section 3 of Act. To read the text otherwise would suggest that Congress intended the liability protections of section 230 to apply narrowly, excluding, for example, local exchange carriers that offered DSL, which as noted above was classified as a telecommunications service until 2005.) We therefore find no basis in section 230 for reconsidering our judgment that this service is properly understood to be a telecommunications service, for the reasons explained above.

387. Finally, we disagree with the suggestion that our decision to "reclassify, to forbear, and to adopt rules grounded in Title II" is not a "logical outgrowth" of the 2014 Open Internet NPRM. The approach we adopt today is more than a logical outgrowth of the NPRM; it is one that the NPRM expressly identified as an alternative course of action. It is one on which the Commission sought comment in almost

every section of the NPRM. (Thus, at the very outset, in addition to "the [section 706] blueprint offered by the D.C. Circuit" on which the dissent now seeks to focus, Pai Dissent at 16–19, the Commission made clear that in looking for the "best approach to protecting and promoting Internet openness," it "will seriously consider the use of Title II," "seeks comment on the benefits of both

. . ., including the benefits of one approach over the other," and "emphasize[s]... that the Commission recognizes that both section 706 and Title II are viable solutions and seek[s] comment on their potential use." The *NPRM* in this proceeding is thus nothing like the NPRM that was at issue in Prometheus. Prometheus Radio Project v. FCC, 652 F.3d 431 (3rd Cir. 2011). We also note that, under the APA, notice-and-comment rulemaking requirements apply only to the extent that we herein adopt legislative rules. 5 U.S.C. 553(b)(A), 553(d)(2).) It is one that several broadband Internet access service providers vigorously opposed in their comments in light of their own reading of the NPRM. (Dissents to the NPRM likewise reflect that this approach was on the table. See 2014 Open Internet NPRM, 29 FCC Rcd at 5653-55 (dissenting Statement of Commissioner Pai) (recognizing "[i]t's not news that people of good faith disagree" on the right approach, stating that ``[s]ome would like to regulate broadband providers as utilities under Title II," and discussing the scope of Title II's "unjust or unreasonable discrimination" requirement, the consequences of reclassification under Title II, and the alleged regulatory uncertainties posed under either section 706 "or Title II"). Dissents to the NPRM likewise reflect that this approach was on the table. See 2014 Open Internet NPRM, 29 FCC Rcd at 5653 through 55 (dissenting Statement of Commissioner Pai) (recognizing "[i]t's not news that people of good faith disagree" on the right approach, stating that "[s]ome would like to regulate broadband providers as utilities under Title II," and discussing the scope of Title II's "unjust or unreasonable discrimination" requirement, the consequences of reclassification under Title II, and the alleged regulatory uncertainties posed under either section 706 "or Title II").)

4. Mobile Broadband Internet Access Service Is Commercial Mobile Service

388. As outlined above, we conclude that broadband Internet access service, whether provided by fixed or mobile providers, is a telecommunications service. We also find that mobile broadband Internet access service is a commercial mobile service. In any event, however, even if that service falls outside the definition of "commercial mobile service," we find that it is the functional equivalent of a commercial mobile service and, thus, not a private mobile service.

389. Congress adopted the commercial mobile service provisions in the Act with the goal of creating regulatory symmetry among similar mobile services. Section 332(d)(1) of the **Communications Act 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, as specified by regulation by the Commission." We find that mobile broadband Internet access service meets this definition. First, we find that mobile broadband Internet access service is a "mobile service' because subscribers access the service through their mobile devices. Next, we find that mobile broadband Internet access service is provided "for profit" because service providers offer it to subscribers with the intent of receiving compensation. We also conclude the mobile broadband Internet access services are widely available to the public, without restriction on who may receive them.

390. Finally, we conclude that mobile broadband Internet access service is an interconnected service. Section 332(d)(2) states that the term "interconnected service" means "service that is interconnected with the public switched network (as such terms are defined by regulation by the Commission)" The Commission has defined "interconnected service" as a service "that gives subscribers the capability to communicate to or receive communication from all other users on the public switched network." The Commission has defined the term "public switched network" to mean "[a]ny common carrier switched network, whether by wire or radio, including local exchange carriers, interexchange carriers, and mobile service providers, that use[s] the North American Numbering Plan in connection with the provision of switched services."

391. While mobile broadband Internet access service does not use the North American Numbering Plan, we conclude for the reasons set out below that we should update our definition of public switched network pursuant to the authority granted to the Commission in section 332 so that our definition reflects the current network landscape

rather than that existing more than 20 years ago. In its Order defining the terms "interconnected" and "public switched network" the Commission concluded that the term "public switched network" should not be defined in a static way, recognizing that the network is continuously growing and changing because of new technology and increasing demand. The purpose of the public switched network, the Commission noted, is "to allow the public to send or receive messages to or from anywhere in the nation." This quality of "ubiquitous access," for which the NANP was viewed as a proxy in 1994, was consistent with the key distinction underlying the formulation of the CMRS definition by Congressdifferentiating the emerging cellularbased technology for "commercial" SMR service being deployed by Nextel's predecessor as a mass market service from the traditional "private" SMR dispatch services employed by taxi services and other private fleets. Today, consistent with our authority under the Act, and with the Commission's previous recognition that the "public switched network" will grow and change over time, we update the definition of public switched network to reflect current technology. Specifically, we revise the definition of "public switched network" to mean "the network that includes any common carrier switched network, whether by wire or radio, including local exchange carriers, interexchange carriers, and mobile service providers, that use[s] the North American Numbering Plan, or public IP addresses, in connection with the provision of switched services." This definition reflects the emergence and growth of packet switched Internet Protocol-based networks. Revising the definition of public switched network to include networks that use standardized addressing identifiers other than NANP numbers for routing of packets recognizes that today's broadband Internet access networks use their own unique addressing identifier, IP addresses, to give users a universally recognized format for sending and receiving messages across the country and worldwide. (This definitional change to our regulations in no way asserts Commission jurisdiction over the assignment or management of IP addressing by the Internet Numbers Registry System.) We find that mobile broadband Internet access service is interconnected with the "public switched network" as we define it today and is therefore an interconnected service.

Some commenters contend that the Commission is barred from taking any actions that would change the definition of 'public switched network.'' CTIA, for example, argues that a revision to the definition of "public switched network" is 'beyond the scope of this rulemaking' because the 2014 Open Internet NPRM "only asks whether mobile broadband falls within the definition of CMRS and does not propose any changes to the well-established definitions in section 20.3 of the FCC's rules." AT&T similarly argues that the Commission has not provided sufficient public notice. CTIA also argues that, even if there were notice, the Commission could not interpret the definition of "public switched network" to include the Internet, stating that "[w]hile section 332 directs the Commission to define 'public switched network' by regulation, that definition must be consistent with the statutory text and congressional intent. Here, whatever limited discretion the Commission has as to that definition, it cannot be interpreted broadly enough to cover the broadband Internet." Verizon agrees that the NPRM did not provide notice that the Commission might change its regulations or their interpretation. In addition, Verizon argues that, although the Commission is statutorily authorized to define "public switched network," the definition must still be consistent with the statutory text and congressional intent. Accordingly, Verizon contends, "no matter how the Commission may redefine the 'public switched network' any new definition still would need to be anchored to the public switched telephone networks, which is what section 332 was designed to address.'

392. Contrary to these arguments, we find that revising the definition of 'public switched network'' and classifying mobile broadband Internet access service as a commercial mobile service is a logical outgrowth of the proposals in the 2014 Open Internet NPRM. As discussed above, in the NPRM, the Commission proposed relying on section 706 of the Telecommunications Act of 1996 for legal authority to adopt rules to protect the open Internet but indicated that it would also seriously consider the use of Title II of the Communications Act as a basis for legal authority. The Commission sought comment on whether, in the event that it decided to reclassify broadband Internet access service under Title II, mobile broadband Internet access service would fit within the definition of "commercial mobile service" under section 332 of the Act and the Commission's rules implementing that section. In addition, the *NPRM* noted that the Commission's Broadband Classification NOI also asked whether the Commission should revisit its classification of wireless broadband Internet access services, noted that the NOI docket "remains open," and directed that the record be refreshed in that proceeding "including the inquiries contained herein." In the

Broadband Classification NOI, the Commission sought comment on "legal issues specific to . . . wireless services that bear on their appropriate classification." More specifically, it asked "which of the three legal frameworks" described therein (which included a Title II approach) "would best support the Commission's policy goals for wireless broadband." In particular, it asked "[t]o what extent should section 332 of the Act affect our classification of wireless broadband Internet services?" In the 2014 Open Internet NPRM, the Commission also noted that section 332 requires that wireless services that meet the definition of commercial mobile services be regulated as common carriers under Title II. The NPRM also asked about the extent to which forbearance should apply, if the Commission were to classify mobile broadband Internet access service as a CMRS service subject to Title II, and noted that the Broadband Classification NOI also asked whether the Commission could and should apply section 332(c)(1) as well as section 10 in its forbearance analysis for mobile services. The 2014 Open Internet NPRM also sought comment on defining mobile broadband Internet access service and on application of Internet openness requirements to mobile broadband services.

393. We find that our decision today to classify mobile broadband Internet access service as both a telecommunications service under Title II and CMRS is a logical outgrowth of these discussions and requests for comments. The discussion and questions posed in the 2014 Open *Internet NPRM* gave clear notice that the Commission was considering whether to reclassify mobile broadband Internet access under Title II as a telecommunications service and whether mobile broadband Internet access service would fit within the definition of "commercial mobile service" under the Act and the Commission's rules, including whether mobile broadband would meet the "interconnected service" component of the commercial mobile service definition. It was "reasonably foreseeable" that in answering that question the Commission would explore the scope of that component of the definition. Stated another way, "interested parties should have anticipated that the change [in that definition] was possible, and thus reasonably should have filed their comments on the subject during the notice-and-comment period." While we think this proposition is clear from the

questions posed by the 2014 Open Internet NPRM, we further note that in this case mobile broadband providers "themselves had no problem understanding the scope of the issues up for consideration; several . . . submitted comments" on the issue. And, other parties commented that the Commission should update its definition of the term "public switched network." Moreover, as referenced above, evidence in the record shows that a number of parties have directly addressed the application of section 332(d) and the Commission's implementing rules to mobile broadband Internet access and thus have been aware that the Commission was considering taking action to update the definition of "public switched network" and reclassify mobile broadband Internet access as commercial mobile service.

394. We also disagree with arguments that we are barred from updating the definition of public switched network to include networks that use addressing identifiers beyond NANP numbers associated with traditional telephone networks. CTIA, Verizon, and AT&T argue that the history of the legislation that defined "commercial mobile service" indicates that Congress intended the term "public switched network" to mean the "public switched *telephone* network." CTIA, for example, argues that when Congress used the term "public switched network" in 1993, "it did so knowing that the Commission and the courts routinely used that term interchangeably with 'public switched telephone network' and that "[i]t is axiomatic that, when Congress 'borrows' a term of art that has been given meaning by the courts or the relevant agency, it 'intended [that term] to have its established meaning.'" It argues also that "the Conference Report accompanying the legislation confirms that, although Congress used the term 'public switched network,' it viewed that term as synonymous with 'the [p]ublic switched telephone network.'" AT&T notes that Congress "used the term 'the public switched network'' and that "Congress's use of the definite article 'the' and the singular 'network' makes clear that it was referring to a single 'public switched network'" The parties also argue that the text of the FirstNet public safety legislation supports their argument because it distinguishes between the "public switched network" and the "public Internet. AT&T contends also that the text of section 230 supports its views.

395. We agree with other commenters that these arguments do not give sufficient weight to Congressional intent as reflected in the text of the statute itself. As noted above, section 332(d)(2) of the Act uses the term "public switched network" rather than "public switched telephone network." Moreover, as CTIA, Verizon, and AT&T acknowledge, the statute expressly delegates authority to the Commission to define the term "public switched network." While we agree with CTIA that the delegation of authority does not provide boundless discretion, we find that what is clear from the statutory language is not what the definition of "public switched network" was intended to cover but rather that Congress expected the notion to evolve and therefore charged the Commission with the continuing obligation to define it. In short, by defining such terms by reference to the way they "are defined by regulation by the Commission," Congress expressly delegated this policy judgment to the Commission. As noted above, in defining the terms "interconnected service" and "public switched network," the Commission concluded that the term "public switched network" should not be defined in a static way and recognized that the network is continuously growing and changing because of new technology and increasing demand. The Commission expressly rejected calls in 1994 to define the public switched network as the "public switched telephone network" finding that a broader definition was consistent with Congress's decision to use the term "public switched network," rather "than the more technologically based term 'public switched telephone network.'" (Contrary to one of the dissenting statements, (Pai Dissent at 46-47 & n.337), the Commission made clear it was not limiting the term "public switched network" to the traditional network. First, as noted above, it rejected that view in favor of the position of other commenters that "the network should not be defined in a static way," an interpretation it found more consistent with the determination by Congress not to employ the term "public switched telephone network." Second, it stated that any switched common carrier service that is interconnected with the traditional local or interexchange switched network would be defined "as part of" the public switched network "for purposes of our definition," Second CMRS Report and Order, 9 FCC Rcd at 1436 through 1437, 59 FR 18493, Apr. 19, 1994. Even as early as 1994, the comments on which

the Commission relied for its definition, id. at 1437, para. 60, made this very point. Comments of other wireless providers, with whom the Commission agreed about avoiding "a static way" of defining the network, *id.* at 1436, para. 59, made the same point.) Today, we build upon this analysis and update our definition of "public switched network" to reflect changes in technology. Reflecting the foregoing changes in technology and telecommunications infrastructure, our definition contemplates a single network comprised of all users of public IP addresses and NANP numbers, and not two separate networks as AT&T argues. We find that this action is consistent both with the text of the statute and Congressional intent. (We are not persuaded by AT&T's arguments that rely, not on the foregoing language or purpose of the 1993 statute at issue, but on subsequent statutes enacted for different purposes in 1996 and 2012. Quite apart from canons of statutory construction, this argument disregards the signal difference in section 332(d), which delegates the question of the scope of its terms to the Commission in light of its experience and market developments over time. We note, however, that AT&T's reliance on the "policy" of the 1996 Act reflected in section 230 is similar to one that Verizon made but that was not found by the Verizon court to be a bar to its conclusion that "section 706 grants the Commission authority to promote broadband deployment by regulating how broadband providers treat edge providers.")

396. We recognize that, in the 2007 Wireless Broadband Classification *Order,* the Commission previously concluded that section 332—"as implemented by the Commission's CMRS rules"-did not contemplate wireless broadband Internet access service "as provided today," citing the Second CMRS Report and Order's finding that "'commercial mobile service' must still be interconnected with the local exchange or interexchange switched network as it evolves." The Commission also found that mobile broadband Internet access was not an "interconnected service" based on its reading of the Commission's existing rule, because the service did not provide its users with the capability to reach all other users of the public switched network. In addition, in 2011, in its order adopting data roaming requirements, the Commission defined services subject to the data roaming rule as services that are not interconnected with the public

switched network. (The Commission defined "commercial mobile data service" which is subject to the data roaming rule as "any mobile data service that is not interconnected with the public switched network." Opponents of reclassifying mobile broadband Internet access services have argued that the D.C. Circuit's decisions on data roaming and on the 2010 Open Internet Order bar the Commission from reclassifying mobile broadband Internet access as commercial mobile service. First, we note that the issue of revising the Commission's definitions was neither raised nor discussed in the data roaming or open Internet decisions. Moreover, contrary to these arguments, we find that the Court's acceptance of the Commission's previous decisions based on its existing definitions does not preclude the Commission from revisiting and revising its definitions, as expressly permitted by the language of section 332. We note that if a mobile service is not interconnected to the public switched network (as updated herein) and otherwise meets the definition of "commercial mobile data service" in section 20.3 of the Commission's rules, it will continue to be subject to the data roaming rules.) However, the 2007 Wireless Broadband Classification Order (on which the 2011 Data Roaming Order also relied) was premised both on its view of the service "as provided today" and on "an internal contradiction" that a finding that wireless broadband Internet access was a commercial mobile would have caused with the finding that it was an "information service." Moreover, in neither instance did the Commission consider whether it should revise the definition of "public switched network," on which its conclusion in the 2007 Wireless Broadband Classification Order was premised.

397. Today, we update the definition of "public switched network" to reflect current technology and conclude that mobile broadband Internet access is an interconnected service. First, as outlined above, we find that mobile broadband is an "interconnected service" because it interconnects with "public switched network" as we define it today. We find also that mobile broadband is an interconnected service because it gives its users the capability to send and receive communications from all other users of the Internet. In defining the term "interconnected service" in the Second CMRS Report and Order, the Commission indicated its belief that, by using the term "interconnected service," Congress intended to focus on whether mobile

services "make interconnected service broadly available through their use of the public switched network." In addition, the Commission noted that Congress's purpose was to "ensure that a mobile service that gives its customers the capability to communicate or to receive communications from other users of the public switched network should be treated as a common carriage offering." This was by contrast with the alternative "private mobile service" classification, which by statute includes services not "effectively available to a substantial portion of the public." Mobile broadband Internet access service fits the former classification as millions of subscribers use it to send and receive communications on their mobile devices every day. In sharp contrast to 2007 when the Commission characterized mobile broadband Internet access services as being in a nascent stage, today the mobile broadband marketplace has evolved such that hundreds of millions of consumers now use mobile broadband to access the Internet. For example, as noted earlier, 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. In addition, the number of mobile connections already exceeds the U.S. population and Cisco forecasts that by 2019, North America will have nearly 90% of its installed based converted to smart devices and connections, and smart traffic will grow to 97% of the total global mobile traffic. Mobile broadband subscribers, who use the same devices to receive voice and data communications, can also send or receive communications to or from anywhere in the nation, whether connected with other mobile broadband subscribers, fixed broadband subscribers, or the hundreds of millions of Web sites available to them over the Internet. This evidence of the extensive changes that have occurred in the mobile marketplace demonstrates the ubiquity and wide scale use of mobile broadband Internet access service today.

398. Today we update the definition of "public switched network" to reflect current mass market communications network technologies and configurations, and the rapidly growing and virtually universal use of mobile broadband service. It also is more consistent with Congressional intent to recognize as an "interconnected service" today's broadly available mobile broadband Internet access service, which connects with the Internet and provides its users with the

ability to send and receive communications from all other users connected to the Internet, (whether fixed or mobile). As CTIA recognizes, Congress's intent in enacting section 332 was to create a symmetrical regulatory framework among similar mobile services that were made available "to the public or . . . to such classes of eligible users as to be effectively available to a substantial portion of the public." Given the universal access provided today and in the foreseeable future by and to mobile broadband and its present and anticipated future penetration rates in the United States, we find that our decision today classifying mobile broadband Internet access as a commercial mobile service is consistent with Congress's objective. As noted above, that is a policy judgment that section 332(d) expressly delegated to the Commission, consistent with its broad spectrum management authority under Title III.

399. Moreover, we agree with commenters who argue that mobile broadband Internet access service meets the definition of interconnected service for a wholly independent reason: Because-even under our existing definition of "public switched network" adopted in 1994—users have the "capability," as provided in section 20.3 of our rules, to communicate with NANP numbers using their broadband connection through the use of VoIP applications. Other parties disagree, arguing that, regardless of the attributes of VoIP services that ride over broadband Internet access networks, broadband Internet access service itself does not offer the ability to reach all NANP endpoints. These parties note also that the Commission itself has previously concluded that mobile broadband Internet access, in and of itself, does not provide the ability to reach all other users of the public switched network.

400. We find that the Commission's previous determination about the relationship between mobile broadband Internet access and VoIP applications in the context of section 332 no longer accurately reflects the current technological landscape. Today, users on mobile networks can communicate with users on traditional copper based networks and IP based networks, making more and more networks using different technologies interconnected. In addition, mobile subscribers continue to increase their use of smartphones and tablets and the significant growth in the use of mobile broadband Internet access services has spawned a growing mobile application ecosystem. The changes in

the marketplace have increasingly blurred the distinction between services using NANP numbers and services using public IP addresses and highlight the convergence between mobile voice and data networks that has occurred since the Commission first addressed the classification of mobile broadband Internet access in 2007. Today, mobile VoIP, as well as over-the-top mobile messaging, is among the increasing number of ways in which users communicate indiscriminately between NANP and IP endpoints on the public switched network. In view of these changes in the nature of mobile broadband service offerings, we find that mobile broadband Internet access service today, through the use of VoIP, messaging, and similar applications, effectively gives subscribers the capability to communicate with all NANP endpoints as well as with all users of the Internet. (In support of arguments regarding interconnection, one of the dissents (Pai Dissent at 51 n.362), cites the inapposite Time Warner Cable Request for Declaratory Ruling That Competitive Local Exchange Carriers May Obtain Interconnection under section 251 of the Communications Act of 1934, as Amended, to Provide Wholesale Telecommunications Services to VoIP Providers, Memorandum Opinion and Order, 22 FCC Rcd 3513, 3520, paras. 15 through 16 (Wireline Comp. Bur. 2007). Our interpretation here of the Commission's own rule as to what constitutes the "capability" to communicate with NANP endpoints is a completely different question from whether wholesale carriers are entitled to interconnection rights under section 251 of the Act regardless of the regulatory status of VoIP services provided to end users, which was the issue addressed by the staff in the Time Warner Cable request for a Declaratory Ruling.)

401. We also note that, under the Commission's definition of "interconnected service" in section 20.3 of the rules, a service is interconnected even if ". . . the service provides general access to points on the public switched network but also restricts access in certain limited ways." Thus, the Commission's definition, while requiring that the interconnected service provide the "capability" for access to all other users of the public switched network, also recognizes that services that restrict access to the public switched network, in certain limited ways, should also be viewed as interconnected. (In adopting the definition of interconnected service in

the Second CMRS Report and Order, the Commission recognized that interconnected services could be limited and noted that ''[i]n defining interconnected service in terms of transmissions to or from 'anywhere' on the PSN, we note that it is necessary to qualify the scope of the term 'anywhere'; if a service that provides general access to points on the PSN also restricts calling in certain limited ways (e.g., calls attempted to be made by the subscriber to '900' telephone numbers are blocked), then it is our intention still to include such a service within the definition of 'interconnected service' for purposes of our part 20 rules.") Accordingly, to the extent that there is an argument that, even with an updated definition of public switched network, mobile broadband Internet access still would not meet the definition of interconnected because it would only enable communications with some rather than all users of the public switched network, i.e., users with NANP numbers, we disagree and find that the Commission's rules recognize that interconnected services may be limited in certain ways. Our interpretation of the Commission's rules is consistent with their purpose, which is to ascertain whether the interconnected service is "broadly available." It is also most consistent with, and must be informed by, the key section 332(d) guidepost that Congress provided to the Commission in granting it authority to define these terms. This guidepost refers to a service available to "the public" or to such classes of eligible users as to be effectively available "to a substantial portion of the public." This focus of the inquiry on availability to the public or a substantial portion of it is also consistent with the specific purpose of the statute, which was to create a symmetrical regulatory framework for similar commercial services then being offered to consumers by cellular licenses and by SMR licensees who were using licenses that traditionally had been used to provide wireless service only to limited groups of users (e.g., taxi fleets). (To make this point clear, and in the exercise of our authority to "specif[y] by regulation" what services qualify as CMRS services that make interconnected service available to the public or to such classes of eligible users as to be effectively available to a substantial portion of the public, we have made a conforming change to the definition of Interconnected Service in section 20.3 of the Commission's rules.)

402. Lastly, because today we classify mobile broadband Internet access

service as a telecommunications service. designating it also as commercial mobile service subject to Title II is most consistent with Congressional intent to apply common carrier treatment to telecommunications services. Specifically, as in 2007, but for different reasons in light of our reclassification of the service as a "telecommunications service," we find that classifying mobile broadband Internet access service as a commercial mobile service is necessary to avoid a statutory contradiction that would result if the Commission were to conclude both that mobile broadband Internet access was a telecommunications service and also that it was not a commercial mobile service. A statutory contradiction would result from such a finding because, while the Act requires that providers of telecommunications services be treated as common carriers, it prohibits common carrier treatment of mobile services that do not meet the definition of commercial mobile service. Finding mobile broadband Internet access service to be commercial mobile service avoids this statutory contradiction and is most consistent with the Act's intent to apply common carrier treatment to providers of telecommunication

services.

403. Mobile Broadband Internet Access Service Is Not a Private Mobile Service. Our conclusion that mobile broadband Internet access service is a commercial mobile service, through the application of our updated definition of "public switched network," leads unavoidably to the conclusion that it is not a private mobile service. Indeed, we believe that today's mobile broadband Internet access service, with hundreds of millions of subscribers and the characteristics discussed above, is not akin to the private mobile service of 1994, such as a private taxi dispatch service, services that offered users access to a discrete and limited set of endpoints. Even, however, if that were not so, there is another reason that mobile broadband Internet access service is not a private mobile service: It is the functional equivalent of a commercial mobile service, even under the previous definition of "public switched network." As with the policy judgments reflected in the other two definitional subsections of section 332(d) and described above, Congress expressly delegated authority to the Commission to determine whether a particular mobile service may be the functional equivalent of a commercial mobile service. Specifically, section 332 of the Act defines "private mobile service" as "any mobile service . . .

that is not a commercial mobile service or the functional equivalent of a commercial mobile service, as specified by regulation by the Commission." We find that mobile broadband Internet access service is functionally equivalent to 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 on their mobile device to and from the public. Although the services use different addressing identifiers, from an end user's perspective, both are commercial services that allow users to communicate with the vast majority of the public.

404. CTIA, Verizon, and AT&T argue that mobile broadband Internet access service cannot be considered the functional equivalent of commercial mobile service. First, they argue that the Commission failed to provide notice that it might deem mobile broadband the functional equivalent of CMRS. Next, CTIA argues that "Congress intended the hallmark of CMRS to be the provision of interconnected service through use of the PSTN. No service lacking this essential attribute could amount to a functional equivalent of CMRS." Verizon argues that "because mobile broadband Internet access service cannot, on its own, be used to place calls to telephone numbers, and CMRS cannot be used to connect with (for example) Google's search engine or Amazon.com or any of the millions of other sources of online content, these two services are not substitutes, and cannot be deemed functionally equivalent." AT&T and CTIA argue that mobile broadband Internet access is not a substitute for CMRS and therefore is not the functional equivalent of CMRS. Verizon, CTIA, and AT&T argue that the issue of whether or not mobile VoIP applications or services themselves may be interconnected with the public switched network should have no bearing on the determination of whether mobile broadband Internet access service itself may be viewed as the functional equivalent of commercial mobile service.

405. We disagree with these arguments. First, for the reasons discussed above, we disagree with the parties' arguments regarding notice. We find that our decision today that mobile broadband Internet access service may be viewed as the functional equivalent of commercial mobile service is a logical outgrowth of the discussions and questions presented in the 2014 Open Internet NPRM. As noted above, our 2014 Open Internet NPRM sought comment on the option of revising the classification of mobile broadband Internet access service and on whether it would fit within the definition of commercial mobile service under section 332 of the Act and the Commission's rules implementing that section, including section 20.3. Section 20.3 of the Commission's rules defines commercial mobile radio service as a mobile service that is: "Provided for profit, *i.e.*, with the intent of receiving compensation or monetary gain; an interconnected service; and available to the public or to such classes of eligible users as to be effectively available to a substantial portion of the public; or the functional equivalent of such a mobile have reasonably foreseen and in fact were aware that the Commission would analyze the functional equivalence of mobile broadband Internet access service as part of its consideration of whether it should revise the classification of mobile broadband Internet access and whether mobile broadband Internet access would fit within the definition of commercial mobile service under section 332. Indeed, several parties have submitted comments on this question.

406. We also disagree with CTIA's contention that, if a mobile service is not an interconnected service through the use of the public switched telephone network, it may not be considered the functional equivalent of commercial mobile service. This argument would render the functional equivalence language in the statute superfluous by essentially requiring a functionally equivalent service to meet the literal definition of commercial mobile service. We find that Congress included the functional equivalence provision in the statute precisely to address such new developments for services that may not meet the literal definition of commercial mobile service. We also disagree with Verizon that, because mobile broadband subscribers may use their service to communicate with a different and broader range of entities, the two services cannot be functionally equivalent. As noted above, both mobile broadband Internet access service and commercial mobile service provide their users with a service that enables ubiquitous access to the vast majority of the public. The fact that the services may also enable communications in other ways or with different groups does not make them less useful as substitutes for commercial mobile service. Moreover, regardless of whether providers may offer voice and data services separately, as discussed above,

from both a technical as well as a consumer perspective, there are increasingly fewer distinctions or interoperability issues between these types of services. The marketplace changes that have occurred since the Commission first addressed the classification of mobile broadband Internet access service in 2007 support our finding that mobile broadband Internet access service offered to the mass market must be viewed today as the functional equivalent of commercial mobile service.

407. We recognize that, in the Second CMRS Report and Order, the Commission created a petition-based process for parties interested in challenging the classification of a particular service as private mobile service, and indicated that it would consider a variety of factors to determine whether a particular service is the functional equivalent of a CMRS service. Specifically, as AT&T and CTIA point out, the Commission said it would consider consumer demand for the service in question to determine whether the service is closely substitutable for a commercial mobile radio service; whether changes in price for the service under examination, or for the comparable commercial mobile radio service, would prompt customers to change from one service to the other; and market research information identifying the targeted market for the service under review. Section 20.9 of the Commission's rules articulates the same standard for parties interested in challenging the classification of a service as a private mobile service. While we do not amend section 20.9's separate provision for a petition process in other contexts, for the reasons stated above related to today's widespread distribution and use of mobile broadband devices, we are amending section 20.3 to reflect our conclusion that mobile broadband Internet access service is the functional equivalent of CMRS.

5. The Reclassification of Broadband Internet Access Service Will Preserve Investment Incentives

408. In this section, we address potential effects of our classification decision on investment and innovation in the Internet ecosystem. Our classification of broadband Internet access service flows from the marketplace realities in how this service is offered. In reaching these conclusions, we also consider whether the resulting regulatory environment produces beneficial conditions for investment and innovation while also ensuring that we are able to protect consumers and foster competition. We find that classifying broadband Internet access service as a telecommunications service—but forbearing from applying all but a few core provisions of Title II strikes an appropriate balance by combining minimal regulation with meaningful Commission oversight. This approach is based on the proven model Congress and the Commission have applied to CMRS, under which investment has flourished.

409. Based on our review of the record, the proven application of the CMRS model, and our predictive judgment about the future of the ecosystem under our new legal framework, we conclude that the new framework will not have a negative impact on investment and innovation in the Internet marketplace as a whole. As is often the case when we confront questions about the long-term effects of our regulatory choices, the record in this proceeding presents conflicting viewpoints regarding the likely impact of our decisions on investment. We cannot be certain which viewpoint will prove more accurate, and no party can quantify with any reasonable degree of accuracy how either a Title I or a Title II approach may affect future investment. Moreover, regulation is just one of many factors affecting investment decisions. Although we appreciate carriers' concerns that our reclassification decision could create investment-chilling regulatory burdens and uncertainty, we believe that any effects are likely to be short term and will dissipate over time as the marketplace internalizes our Title II approach, as the record reflects and we discuss further, below. More significantly, to the extent that our decision might in some cases reduce providers' investment incentives, we believe any such effects are far outweighed by positive effects on innovation and investment in other areas of the ecosystem that our core broadband policies will promote. Industry representatives support this judgment, stating that combined reclassification and forbearance decisions will provide the regulatory predictability needed to spur continued investment and innovation not only in infrastructure but also in content and applications.

410. Investment Incentives. The 2014 Open Internet NPRM generated spirited debate about the consequences that classifying broadband Internet access service as a telecommunications service would have for investment incentives. Opponents of reclassification assert that Title II requirements will stifle innovation and investment. Other

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commenters vigorously support the opposite position, asserting that reliance on section 706 authority to support open Internet rules is a course fraught with prolonged uncertainty that will stifle investment and that has already had detrimental economic effects. These and other commenters claim that a cautious regulatory approach based on Title II will provide much-needed predictability to investors and consumers alike, while ensuring that the Commission has the statutory authority necessary to protect the open Internet, promote competition, and protect consumers.

411. The key drivers of investment are demand and competition. Internet traffic is expected to grow substantially in the coming years, and the profits associated with satisfying that growth provide a strong incentive for broadband providers to continue to invest in their networks. In addition, continuing advances in technology are lowering the cost of providing Internet access service. The possibility of enhancing profit margins can be expected to induce broadband providers to make the appropriate network investments needed to capture a reduction in costs made possible only through technological advances.

412. Competition not only creates the correct incentives for investment and promotes innovation in the broadband infrastructure needed to support robust and ubiquitous Internet access service, but also spurs innovation and investment at the "edge" of the network, where content and applications are created and deployed. As one commenter explains, "Title II promotes competitive entry in at least two ways.' First, section 224 (from which we do not forbear in the context of broadband Internet access service, as discussed below) "ensures that telecommunications carriers receive access to the poles of local exchange carriers and other utilities at just, reasonable, and nondiscriminatory rates," an "important investment benefit that will enable those deploying fiberto-the-home or other competitive networks to deploy more expeditiously and efficiently." (Conversely, ACA asserts that reclassification would result in increased pole attachment rates for many of its members, which would have the effect of lowering investment incentives both for continued investment in existing facilities and for new deployments. We do not agree with ACA's prediction concerning investment incentives. As we explain further below, we are committed to avoiding an outcome in which entities misinterpret today's decision as an

excuse to increase pole attachment rates of cable operators providing broadband Internet access service. It is not the Commission's intent to see any increase in the rates for pole attachments paid by cable operators that also provide broadband Internet access service, and we caution utilities against relying on this decision to that end. This Order does not itself require any party to increase the pole attachment rates it charges attachers providing broadband Internet access service, and we would consider such outcomes unacceptable as a policy matter. We will be monitoring marketplace developments following this Order and will promptly take further action in that regard if warranted. In any case, such arguments do not persuade us not to reclassify broadband Internet access service, since in reclassifying that service we simply acknowledge the reality of how it is being offered today.) Title II also "offers other benefits at the state level, including access to public rights of way," which some broadband providers reportedly utilize to deploy networks.

413. Further, contrary to the assertions of opponents of reclassification, sensible regulation and robust investment are not mutually exclusive. The investment record of incumbent LECs since passage of the 1996 Act calls into question claims that regulation necessarily stifles investment. Indeed, it appears that AT&T, Verizon, and Owest (now CenturyLink) increased their capital investments as a percentage of revenues immediately after the Commission expanded Title II requirements pursuant to the Telecommunications Act of 1996, (The 1996 Telecom Act imposed a set of new obligations on incumbent local exchange carriers, including, most importantly, the duty to provide competing carriers access to unbundled network elements at cost-based rates. See 47 U.S.C. 251(c)(3), 252(d)(1). The Commission adopted rules implementing the unbundling requirements in 1996.) while investment levels decreased after 2001, during a period when the Commission relieved providers of many unbundling requirements and other regulatory obligations. And, of course, wireline DSL was regulated as a common-carrier service until 2005—a period in the late '90s and the first five years of this century, which saw the highest levels of wireline broadband infrastructure investment to date. At a minimum, this evidence demonstrates that robust investment can and does occur even when new regulations are adopted. Our conclusions are not premised on the

assumption that regulation never harms investment, nor do we deny that deregulation often promotes investment; rather, we reject assertions that reclassification will substantially diminish overall broadband investment. This is further supported by examining broadband providers' investment histories since the announcement of the Broadband Classification NOI in 2010. While the Commission did not utilize reclassification to support its 2010 Open Internet Order, it did not close the docket on the Broadband Classification NOI, indicating that reclassification remained an open question. The record demonstrates that broadband providers continued to invest, at ever increasing levels, in their networks post-2010, after which broadband providers were clearly on notice that the Commission was considering reclassifying broadband Internet access service as a telecommunications service and imposing certain Title II regulations upon them.

414. A number of market analysts concur that dire predictions of disastrous effects on investment are overblown. Although some commenters claim that then-Chairman Genachowski's May 6, 2010 announcement that the Commission would consider adopting a Title II approach prompted analysts to downgrade the ratings of Internet access service providers and sent stock prices downward, the effect of this announcement on stock prices, if any, is by no means clear. (Free Press explains that following the announcement of the 2010 Broadband Classification NOI, "[m]ost of the ISP stocks barely moved from this announcement. Verizon and AT&T each fell 2 percent. Cable stocks did drop more (on substantially higher volume), but this was primarily due to

. over-valuation of these stocks following better-than-expected Q1 earnings reports. This was compounded by the broader market concerns stemming from the EU debt crisis." Free Press Comments at 114. In the months following the announcement the "ILECs, Cable and Wireless companies were outperforming the broader market, and vastly outperforming the edge companies' stocks. Comcast was the only ISP in negative territory, yet still outperformed the broader market. And its issues were more related to the merger than the [NOI].") Further, there was no appreciable movement in capital markets following substantial public discussion of the potential use of Title II in November. What is clear from this debate is that stock price fluctuations can be caused by many different factors

and are susceptible to various interpretations. (At any moment in time, the price of a stock reflects the market's valuation of the cash-flow-generating capability of the firm. Because a firm's cash flow is based on a multitude of factors, it is improper to infer that observed stock price changes reflect the market's belief that infrastructure investment will decline.) Accordingly, we find unpersuasive the arguments that Title II classification would have a negative impact on stock value.

415. Tellingly, major infrastructure providers have indicated that they will in fact continue to invest under the framework we adopt, despite suggesting otherwise in their filed comments in this proceeding. For example, Sprint asserts in a letter in this proceeding that "[s]o long as the FCC continues to allow wireless carriers to manage our networks and differentiate our products, Sprint will continue to invest in data networks regardless of whether they are regulated by Title II, section 706, or some other light touch regulatory regime." It adds that "Sprint 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." Verizon's chief financial officer, Francis Shammo, told investors in a conference call in response to a question about the effect of "this move to Title II," that "I mean to be real clear, I mean this does not influence the way we invest. I mean we're going to continue to invest in our networks and our platforms, both in Wireless and Wireline FiOS and where we need to. So nothing will influence that. I mean if you think about it, look, I mean we were born out of a highly regulated company, so we know how this operates.

416. Today's Order addressing forbearance from Title II and accompanying rules for BIAS will resolve concerns about uncertainty regarding the application of Title II to these services, which some argue could chill investment. By grounding our regulatory authority on firm statutory footing and defining the scope of our intended regulation, our decision establishes the regulatory predictability needed by all sectors of the Internet industry to facilitate prudent business planning, without imposing undue burdens that might interfere with entrepreneurial opportunities. Moreover, the forbearance we grant we today is broad in scope and extends to obligations that might be viewed as characteristic of "utility-style" regulation. In particular, we forbear from imposing last-mile unbundling

requirements, a regulatory obligation that several commenters argue has led to depressed investment in the European broadband marketplace. As such, we disagree with commenters who assert that classification of BIAS as a telecommunications service would chill investment due to fears that future Commissions will reverse our forbearance decision, and that forbearance will engender protracted litigation. (Other commenters also wrongly suggest that we plan to apply "old world" common carrier rules to Internet access service, conjuring the specter of pervasive and intrusive costof-service rate regulation.)

417. Some opponents argue that classifying broadband Internet access services as telecommunications services will necessarily lead to regulation of Internet backbone services, CDNs, and edge services, compounding the suppressive effects on investment and innovation throughout the ecosystem. Our findings today regarding the changed broadband market and services offered are specific to the manner in which these particular broadband Internet access services are offered, marketed, and function. We do not make findings with regard to the other services, offerings, and entities over which commenters raise concern, and in fact explicitly exclude such services from our definition of broadband Internet access services.

418. CALinnovates submitted a commissioned White Paper by NERA Economic Consulting, asserting that reclassification will have a strong negative effect on innovation (with associated harms to investment and employment). The White Paper asserts that small edge providers will be harmed by reclassification, as Title II provisions "will serve to increase the capital costs for innovators both directly and indirectly as well as to foster the sort of regulatory uncertainty that deters investors from ever investing." We disagree. The White Paper assumes that broadband Internet access services will be subject to the full scope of Title II provisions, and ascribes increased costs to regulatory uncertainty. As discussed below, we forbear from application of many of Title II's provisions to broadband Internet access services, and in doing so, provide the regulatory certainty necessary to continued investment and innovation. We also reject the argument, set forth by the Phoenix Center, that reclassification would require broadband providers "to create, and then tariff, a termination service for Internet content under section 203 of the Communications Act.'

419. US Telecom submitted a study finding that under Title II regulation, wireline broadband providers are likely to invest significantly less than they would absent Title II regulation over the next five years, putting at risk much of the large capital investments that will be needed to meet the expected increases in demand for data service. The study contains several substantial analytical flaws which call its conclusions into question. First, the study inaccurately assumes that no wireless services are Title II services. In fact, wireless voice service is subject to Title II with forbearance, similar to the approach that we adopt here for BIAS. Second, the empirical models in the study incorrectly leave out factors that are important determinants of the dependent variables. For example, the level of the firm's demand for wireline services and its predicted rate of growth are left out as factors that clearly should be considered as determinants of wireline capital expenditures in Table 1. The statistical models in the paper are thus forced to either over- or underestimate the role of the variables that are considered in the study, and as a result the predicted level of wireline investment subject to Title II regulation and its predicted rate of growth are not correct. We also agree with Free Press' argument that the study ignores the reality that once last-mile networks are built, the substantial initial investment has already been outlayed. For example, for the authors to observe that there was less investment in wireline networks than in wireless networks following the 2009 recession merely observes that wireline networks were largely constructed prior to 2009, while mobile wireless data networks were not. Further, as Free Press asserts, the study ignores evidence of massive network investments by incumbent LECs in the Ethernet market, which is regulated under Title II. The US Telecom study also did not factor in the potential effect of forbearance on investment decisions. We are thus unpersuaded that this study is determinative regarding the effect that reclassification will have on investment.

420. CMRS, Enterprise Broadband, and Voluntary Title II. Our conclusions are further borne out in examining the market for those services that are already subject to Title II. The Commission's experience with CMRS, to which Title II explicitly applies, demonstrates that application of Title II is not inconsistent with robust investment in a service. The sizable investments made by CMRS providers, who operate under a market-based Title II regulatory regime, allow us to predict with ample confidence that our narrowly circumscribed application of Title II to broadband Internet access service will not cripple the regulated industries or deprive consumers of the benefits of continued investment and innovation in network infrastructure and Internet applications.

421. In 1993, Congress established a new regulatory framework for CMRS by giving the Commission the authority to forbear from applying any provision of Title II to CMRS except sections 201, 202, or 208. (This statutory framework, set forth in section 332 of the Communications Act, also preempts State or local government regulation of CMRS rates and entry, but permits State or local regulation of other CMRS terms and conditions.) Congress prescribed the standard for forbearance in terms nearly identical to the standard it later adopted for common carriage services in the Telecommunications Act of 1996. In 1994, the Commission implemented its new authority by forbearing from applying sections 203, 204, 205, 211, 212, and portions of 214, thereby relieving providers of the burdens associated with the filing of tariffs, Commission investigation of new and existing rates, rate prescription and refund orders, regulations governing interlocking directorates, and regulatory control of market entry and exit. CMRS providers remain subject to the remaining provisions in parts I and II of Title II. Recognizing that the "continued success of the mobile telecommunications industry is significantly linked to the ongoing flow of investment capital into the industry,' the Commission sought to ensure that its policies fostered robust investment, and it chose a regulatory path intended to establish "a stable, predictable regulatory environment that facilitates prudent business planning."

422. Mobile providers have thrived under a market-based Title II regime. During the period between 1993 and the end of 2009, while mobile voice was the primary driver of mobile revenues, wireless subscribership grew over 1600 percent, with more than 285 million subscribers at the end of 2009. Industry revenues increased from \$10.9 billion in 1993 to over \$152 billion—a 1300 percent increase. Further, between 1993 and 2009, the industry invested more than \$271 billion in building out their wireless networks, which was in addition to monies spent acquiring spectrum. (We note that Verizon argues that wireless investment began increasing around 2003 due to growth in mobile broadband, and disputes the idea that this investment was driven by CMRS voice services. However, given

that mobile broadband was not classified as a Title I information service until 2007, it is not clear the extent to which increases in investment before then can be attributed to a non-CMRS regulatory environment. Furthermore, voice service has continued to account for a significant portion of revenues. Free Press cites data showing substantial investment growth in the late 1990s (a time of increased demand for voice services) and the late 2000s to present (a period of increased smartphone use). During the latter years, as discussed above, Verizon's LTE network was subject to openness rules imposed by spectrum licensing conditions. Regardless of which assumptions are made, it is clear that there has been substantial network investment by mobile wireless providers during a significant period of time in which these providers' services have been subject to Title II regulation or openness requirements. Indeed, the data suggest that network investments have been driven more by overall market conditions, including consumer demand, than by the particular regulatory framework in place.) Verizon Wireless, in particular, 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. Similarly, during this period, the wireless industry built nearly 235,000 cell sites across the country-more than an 1800 percent increase over the approximately 13,000 sites at the end of 1993. Wireless voice service is now available to over 99.9 percent of the U.S. population. More than 99.4 percent of subscribers are served by at least two providers, and more than 96 percent are served by at least three providers. Finally, the recent AWS auction, conducted under the specter of Title II regulation, generated bids (net of bidding credits) of more than \$41 billion-demonstrating that robust investment is not inconsistent with a light-touch Title II regime. Fears that our classification decision will lead to excessive regulation of Internet access service should be dispelled by our record of regulating the wireless voice industry for nearly twenty years under Title II.

423. In addition, the key provisions of Title II apply to certain enterprise broadband services. In a series of forbearance orders in 2007 and 2008, the Commission forbore from application of a number of Title II's provisions to AT&T, Qwest, Embarq, and Frontier. Since that time, those services have been subject to sections 201, 202, and 208, as well as certain other provisions that the Commission determined were in the public interest. AT&T has recently called this framework an "unqualified regulatory success story," and claimed that these services "represent the epicenter of broadband investment that the Commission's national broadband policies seek to promote." The record does not evince any evidence that continued "light touch" Title II regulation has hindered investment in these services.

424. We observe that Title II currently applies not just to interconnected mobile voice and data services and to enterprise broadband services, but also the wired broadband offerings of more than 1000 rural local exchange carriers (LECs) that voluntarily offer their DSL and fiber broadband services as common carrier offerings "in order to participate in National Exchange Carrier Association (NECA) tariff pools, which allow small carriers to spread costs and risks amongst themselves," without harmful effects on investment. (As discussed above, see section IV.C.1., the broadband Internet access service we define today is itself a transmission service. We disagree with the argument that in classifying BIAS, rather than a transmission "component" of BIAS, we are diverging from prior precedent regarding these DSL services and what the Justices were debating in *Brand X*. See Pai Dissent at 40 through 42. Whether we refer to that function as "access," "connectivity," or "transmission," we have defined BIAS today such that it is the capability to send and receive packets to all or substantially all Internet endpoints. Thus, the service we define and classify today *is* the same transmission service as that discussed in prior Commission orders.) As NTCA, which represents many of these entities, explained, "[c]ontrary to the dire, and somewhat hyperbolic, predictions of a few, the application of Title II only and strictly to the transport and transmission component underpinning retail broadband service will not cause investment in broadband networks and the services that ride atop them to grind to a halt. To the contrary, a continued lack of clear 'rules of the road' is far more likely to have a deleterious effect on investment nationwide by providers large and small." Thus, we disagree with assertions by the American Cable Association that "Title II 'reclassification' or partial 'classification' of broadband Internet access service would have immediate

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and disastrous economic consequences for small and medium-sized ISPs."

D. Judicial Estoppel Does Not Apply Here

425. Finally, we reject the argument that we are judicially estopped from finding that broadband Internet access service is a telecommunications service. Judicial estoppel is an equitable doctrine that courts may invoke at their discretion to prevent a party that prevailed on an issue in one case from taking a contrary position in another case. Several commenters contend that because the Commission successfully argued before the Supreme Court in *Brand X* that cable modem service is an information service, the Commission is judicially estopped from finding that broadband Internet access service is a telecommunications service.

426. We disagree. Although the Supreme Court has not adopted a blanket rule barring estoppel against the government, if it exists at all it is "hen's teeth rare." Judicial estoppel may be invoked against the government only when "it conducts what 'appears to be a knowing assault upon the integrity of the judicial system," such as when the inconsistent positions are tantamount to a knowing misrepresentation or even fraud upon the court. Judicial estoppel will not be applied when the shift in position "is the result of a change in public policy."

427. In Brand X, the Supreme Court confirmed not only that an administrative agency can change its interpretation of an ambiguous statute, but that it "must consider varying interpretations and the wisdom of its policy on a continuing basis." Following that directive, we have reexamined the Commission's prior classification decisions and now conclude that broadband Internet access service is a telecommunications service. This Declaratory Ruling is the result of what we believe to be the better reading of the Communications Act under current factual and legal circumstances; it manifestly is not the product of fraud or other egregious misconduct.

428. Moreover, judicial estoppel does not apply unless a party's current position is "clearly inconsistent" with its position in an earlier legal proceeding. In the *Brand X* litigation and now, the Commission has consistently maintained the position that the relevant statutory provisions are susceptible to more than one reasonable interpretation. Counsel for the Commission argued in *Brand X* that the Commission reasonably construed ambiguous statutory language in finding that cable modem service is an

information service. The Supreme Court agreed and deferred to the Commission's judgment, but recognized that a contrary interpretation also would be permissible: "[O]ur conclusion that it is *reasonable* to read the Communications Act to classify cable modem service solely as an 'information service' leaves untouched Portland's holding that the Commission's interpretation is not the best reading of the statute." Although we respect the Commission's prior classification decisions and the policy considerations underlying them, we believe the better view at this time is that broadband Internet access is a telecommunications service as defined in the Act. Because our decision does not result in "the perversion of the judicial process," judicial estoppel should not be applied here.

E. State and Local Regulation of Broadband Services

429. We reject the argument that "potential state tax implications" counsel against the classification of broadband Internet access service as a telecommunications service. Our classification of broadband Internet access service as a telecommunications service appropriately derives from the factual characteristics of these services as they exist and are offered today. At any rate, we observe that the recently reauthorized Internet Tax Freedom Act (ITFA) prohibits states and localities from imposing "[t]axes on Internet access." This prohibition applies notwithstanding our regulatory classification of broadband Internet access service. Indeed, the legislative history of ITFA emphasizes that Congress drafted its definition of "Internet access" to be independent of the regulatory classification determination in order to "clarify that all transmission components of Internet access, regardless of the regulatory treatment of the underlying platform, are covered under the ITFA's Internet tax moratorium." (Moreover, today's decision would not bring broadband providers within the ambit of any state or local laws that impose property taxes on "telephone companies" or "utilities," as those terms are commonly understood. As noted herein, we are not regulating broadband Internet access service as a utility or telephone company.)

430. Today, we reaffirm the Commission's longstanding conclusion that broadband Internet access service is jurisdictionally interstate for regulatory purposes. (The record generally supports the continued application of this conclusion to broadband Internet access service.) As a general matter, mixed-jurisdiction services are typically subject to dual federal/state jurisdiction, except where it is impossible or impractical to separate the service's intrastate from interstate components and the state regulation of the intrastate component interferes with valid federal rules or policies. (Notwithstanding the interstate nature of BIAS, states of course have a role with respect to broadband. As the Commission has stated "finding that this service is jurisdictionally interstate [] does not by itself preclude'' all possible state requirements regarding that service.) With respect to broadband Internet access services, the Commission has previously found that, "[a]lthough . . broadband Internet access service traffic may include an intrastate component, . . . broadband Internet access service is properly considered jurisdictionally interstate for regulatory purposes." The Commission thus has evaluated possible state regulations of broadband Internet access service to guard against any conflict with federal law. Though we adopt some changes to the legal framework regulating broadband, the Commission has consistently applied this jurisdictional conclusion to broadband Internet access services, and we see no basis in the record to deviate from this established precedent. The "Internet's inherently global and open architecture" enables edge providers to serve content through a multitude of distributed origination points, making end-to-end jurisdictional analysis extremely difficult-if not impossiblewhen the services at issue involve the Internet.

431. We also make clear that the states are bound by our forbearance decisions today. Under section 10(e), "[a] State commission may not continue to apply or enforce any provision" from which the Commission has granted forbearance. With respect to universal service, we conclude that the imposition of state-level contributions on broadband providers that do not presently contribute would be inconsistent with our decision at the present time to forbear from mandatory federal USF contributions, and therefore we preempt any state from imposing any new state USF contributions on broadband-at least until the Commission rules on whether to provide for such contributions. (Preemptive delay of state and local regulations is appropriate when the Commission determines that such action best serves federal communications policies. We note that we are not aware of any current state

assessment of broadband providers for state universal service funds, as we understand that those carriers that have chosen voluntarily to offer Internet transmission as a Title II service classify such revenues as 100 percent interstate.) We recognize that section 254 expressly contemplates that states will take action to preserve and advance universal service, but as discussed below, our actions in this regard will benefit from further deliberation.

432. Finally, we announce our firm intention to exercise our preemption authority to preclude states from imposing obligations on broadband service that are inconsistent with the carefully tailored regulatory scheme we adopt in this Order. While we establish a comprehensive regulatory framework governing broadband Internet access services nationwide today, situations may nonetheless arise where federal and state actions regarding broadband conflict. (We note also that we do not believe that the classification decision made herein would serve as justification for a state or local franchising authority to require a party with a franchise to operate a "cable system" (as defined in section 602 of the Act) to obtain an additional or modified franchise in connection with the provision of broadband Internet access service, or to pay any new franchising fees in connection with the provision of such services.) The Commission has used preemption to protect federal interests when a state regulation conflicts with federal rules or policies, and we intend to exercise this authority to preempt any state regulations which conflict with this comprehensive regulatory scheme or other federal law. For example, should a state elect to restrict entry into the broadband market through certification requirements or regulate the rates of broadband Internet access service through tariffs or otherwise, we expect that we would preempt such state regulations as in conflict with our regulations. While we necessarily proceed on a case-by-case basis in light of the fact specific nature of particular preemption inquiries, we will act promptly, whenever necessary, to prevent state regulations that would conflict with the federal regulatory framework or otherwise frustrate federal broadband policies.

V. Order: Forbearance for Broadband Internet Access Services

433. Having classified broadband Internet access service as a telecommunications service, we now consider whether the Commission should grant forbearance as to any of the resulting requirements of the Act or

Commission rules. As proposed in the 2014 Open Internet NPRM, we do not forbear from sections 201, 202, and 208, along with key enforcement authority under the Act, both as a basis of authority for adopting open Internet rules as well as for the additional protections those provisions directly provide. As discussed below, we also do not forbear from certain provisions in the context of broadband Internet access service to protect customer privacy, advance access for persons with disabilities, and foster network deployment. Because we believe that those protections and our open Internet rules collectively will strike the right balance at this time of minimizing the burdens on broadband providers while still adequately protecting the public, particularly given the objectives of section 706 of the 1996 Act, we otherwise grant substantial forbearance.

A. Forbearance Framework

434. Section 10 provides that the Commission "shall" forbear from applying any regulation or provision of the Communications Act to telecommunications carriers or telecommunications services if the Commission determines that:

(1) Enforcement of such regulation or provision is not necessary to ensure that the charges, practices, classifications, or regulations by, for, or in connection with that telecommunications carrier or telecommunications service are just and reasonable and are not unjustly or unreasonably discriminatory;

(2) enforcement of such regulation or provision is not necessary for the protection of consumers; and

(3) forbearance from applying such provision or regulation is consistent with the public interest. (For the same reasons set forth herein with respect to the forbearance granted under our section 10(a) analysis, forbearance from those same provisions and regulations in the case of the mobile broadband Internet access services also is consistent with the virtually identical forbearance standards for CMRS set forth in section 332(c)(1)(A).)

435. The Commission previously has considered whether a current need exists for a rule in evaluating whether a rule is "necessary" under the first two prongs of the three-part section 10 forbearance test. In particular, the current need analysis assists in interpreting the word "necessary" in sections 10(a)(1) and 10(a)(2). For those portions of our forbearance analysis that do require us to assess whether a rule is necessary, the D.C. Circuit concluded that "'it is reasonable to construe 'necessary' as referring to the existence of a strong connection between what the agency has done by way of regulation

and what the agency permissibly sought to achieve with the disputed regulation." In contrast, section 10(a)(3) requires the Commission to consider whether forbearance is consistent with the public interest, an inquiry that also may include other considerations.

436. Also central to our analysis, section 706 of the 1996 Act "explicitly directs the FCC to 'utiliz[e]' forbearance to 'encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans." In its most recent Broadband Progress Report, the Commission found "that broadband is not being deployed to all Americans in a reasonable and timely fashion." This, in turn, triggers a duty under section 706 for the Commission to "take immediate action to accelerate deployment." Within the statutory framework that Congress established, the Commission "possesses significant, albeit not unfettered, authority and discretion to settle on the best regulatory or deregulatory approach to broadband."

437. This proceeding is unlike typical forbearance proceedings in that, often, a petitioner files a petition seeking relief pursuant to section 10(c). In such proceedings, "the petitioner bears the burden of proof—that is, of providing convincing analysis and evidence to support its petition for forbearance." However, under section 10, the Commission also may forbear on its own motion. Because the Commission is forbearing on its own motion, it is not governed by its procedural rules insofar as they apply, by their terms, to section 10(c) petitions for forbearance. (We thus also reject criticisms of possible forbearance based on arguments that the 2014 Open Internet NPRM would not satisfy those rules. Indeed, while the Commission modeled its forbearance procedural rules on procedures from the notice and comment rulemaking context in certain ways, in other, significant ways it drew upon procedures used outside that context. Thus, the Commission's adoption of these rules neither expressly bound the Commission nor reflected its view of the general standards relevant to a notice and comment rulemaking.) Further, the fact that the Commission may adopt a rule placing the burden on a party filing a section 10(c) petition for forbearance in implementing an ambiguous statutory provision in section 10 of the Act, does not require the Commission to assume that burden where it forbears on its own motion, and we reject suggestions to the contrary. Because the Commission is not responding to a petition under section 10(c), we conduct our forbearance

analysis under the general reasoned decision making requirements of the Administrative Procedure Act, without the burden of proof requirements that section 10(c) petitioners face. We conclude that the analysis below readily satisfies both the standards of section 10 (We conclude that the section 10 analytical framework described above comports with the statutory requirements, and is largely consistent with alternative formulations suggested by others. To the extent that such comments could be read to suggest different analyses in any respects, we reject them as not required by section 10, as we interpret it above.) and the reasoned decision making requirements of the APA and thus reject claims that broad forbearance accompanying classification decisions necessarily would be arbitrary and capricious.

438. We reject arguments suggesting that persuasive evidence of competition is a necessary prerequisite to granting forbearance under section 10 even if the section 10 criteria otherwise are met. For example, the Commission has in the past granted forbearance from particular provisions of the Act or regulations where it found the application of other requirements (rather than marketplace competition) adequate to satisfy the section 10(a) criteria, and nothing in the language of section 10 precludes the Commission from proceeding on that basis where warranted. (Section 10(b) does direct the Commission to consider whether forbearance will promote competitive market conditions as part of the public interest analysis under section 10(a)(3). However, while a finding that forbearance will promote competitive market conditions may provide sufficient grounds to find forbearance in the public interest under section 10(a)(3), see id., nothing in the text of section 10 makes such a finding a necessary prerequisite for forbearance where the Commission can make the required findings under section 10(a) for other reasons. For similar reasons we reject the suggestion that more geographically granular data or information or an otherwise more nuanced analysis are needed with respect to some or all of the forbearance granted in this Order. The record and our analysis supports forbearance from applying the statutory provisions and Commission regulations to the extent described below based on considerations that we find to be common nationwide, and as discussed in our analysis of the record below, we do not find persuasive evidence or arguments to the contrary in the record as to any narrower geographic area(s) or

as to particular provisions or regulations.) Thus, although, in appropriate circumstances, persuasive evidence of competition can be a sufficient basis to grant forbearance, it is not inherently necessary to a grant of forbearance under section 10. The Qwest Phoenix Order, cited by some commenters in this regard, is not to the contrary. Unlike here, the Commission in the Qwest Phoenix Order was addressing a petition where the rationale for forbearance was premised on the state of competition. (Insofar as the Commission likewise was responding to arguments that competition was sufficient to warrant forbearance when acting on other forbearance petitions, this distinguishes those decisions, as well. Likewise, to the extent that the Commission has found competition to be a sufficient basis to grant forbearance on its own motion in the past, that does not dictate that it only can grant forbearance under such circumstances. Rather, the Commission grants forbearance where it finds that the section 10(a) criteria are met.) This proceeding does not involve a similar request for relief, and, indeed, the Qwest Phoenix Order itself specifically observed that "a different analysis may apply when the Commission addresses advanced services, like broadband services," where the Commission, among other things, "must take into consideration the direction of section 706." For similar reasons we reject as inconsistent with the text of section 10 and our associated precedent the argument that forbearance only is appropriate when the grant of forbearance will itself spur conduct that mitigates the need for the forborne-from requirements.

B. Maintaining the Customer Safeguards Critical to Protecting and Preserving the Open Internet

439. As discussed below, we find sections 201 and 202 of the Act, along with section 208 and certain fundamental Title II enforcement authority, necessary to ensure just and reasonable conduct by broadband providers and necessary to protect consumers under sections 10(a)(1) and (a)(2). We also find that forbearance from these provisions would not be in the public interest under section 10(a)(3), and therefore do not grant forbearance from those provisions and associated enforcement procedural rules with respect to the broadband Internet access service at issue here.

1. Authority To Protect Consumers and Promote Competition: Sections 201 and 202

440. The Commission has found that sections 201 and 202 "lie at the heart of consumer protection under the Act,' and we find here that forbearance from those provisions would not be in the public interest under section 10(a)(3). The Commission has never previously forborne from applying these "bedrock consumer protection obligations," and we generally do not find forbearance warranted here. This conclusion is consistent with the views of many commenters that any service classified as a telecommunications service should remain subject to those provisions. However, particularly in light of the protections the open Internet rules provide and the ability to employ sections 201 and 202 in case-by-case adjudications, we are otherwise persuaded to forbear from applying sections 201 and 202 of the Act in a manner that would enable the adoption of *ex ante* rate regulation of broadband Internet access service in the future, as discussed below. (To be clear, this ex ante rate regulation forbearance does not extend to inmate calling services and therefore has no effect on our ability to address rates for inmate calling services under section 276.)

441. For one, sections 201 and 202 help enable us to preserve and protect Internet openness broadly, and applying those provisions benefits the public broadly by helping foster innovation and competition at the edge, thereby promoting broadband infrastructure investment nationwide. As explained above, the open Internet rules adopted in this Order reflect more specific protections against unjust or unreasonable rates or practices for or in connection with broadband Internet access service. These benefits-which can extend beyond the specific dealings between a given broadband provider and a given customer—persuade us that forbearance from sections 201 and 202 here is not in the public interest.

442. Retaining these provisions, moreover, is in the public interest because it provides the Commission direct statutory authority to protect Internet openness and promote fair competition while allowing the Commission to adopt a tailored approach and forbear from most other requirements. As discussed below, this includes forbearance from the preexisting *ex ante* rate regulations and other Commission rules implementing sections 201 and 202. (We thus reject the arguments of some commenters against the application of these provisions insofar as they assume that such additional regulatory requirements also will apply in the first instance.) As another example, this authority supports our forbearance from other interconnection requirements in the Act. Such considerations provide additional grounds for our conclusion that section 10(a)(3) is not satisfied as to forbearance from sections 201 and 202 of the Act with respect to broadband Internet access service.

443. We also conclude that it would not be in the public interest to forbear from applying sections 201 and 202 given concerns that limited competition could, absent the backstop provided by that authority, result in harmful effects. Among other things, broadband providers are in a position to be gatekeepers to the end-user customers of their broadband Internet access service. In addition, although there is some amount of competition for broadband Internet access service, it is limited in key respects. While harmful practices by broadband providers—whether in general or as to particular customersconceivably could motivate an end user to select a different provider of broadband Internet access service, the record does not provide convincing evidence of the nature or extent of such effects in particular. (Commenters citing generalized information about the extent of switching among broadband providers does not address the specific concerns that we identify here about consumers' likelihood and ability to switch broadband providers based on particular practices by those providers, nor on the likelihood that any such switching would deter the harmful conduct.) To the contrary, for example, data show that the majority of Americans face a choice of only two providers of fixed broadband for service at speeds of 3 Mbps/768 kbps to 10 Mbps/768 kbps, and no choice at all (zero or one service provider) for service at 25/3 Mbps. We also find significant costs associated with switching service that further limit the potential benefits of any competition that would otherwise exist. These collectively persuade us that we cannot simply conclude, as a general matter, that there is extensive competition sufficient to constrain providers' conduct here. Moreover, as the Commission found in the CMRS context, competition would "not necessarily protect all consumers from all unfair practices. The market may fail to deter providers from unreasonably denying service to, or discriminating against, customers whom they may view as less desirable." In addition, and again similar to the

Commission's conclusion in the CMRS context, even in a competitive market certain conditions could create incentives and opportunities for service providers to engage in discriminatory and unfair practices. (For the same reasons discussed above, we are not persuaded to reach a different forbearance decision based on asserted levels of competition faced by small- or mid-sized broadband providers.) Furthermore, no matter how many options end users have in selecting a provider of Internet access service, or how readily they could switch providers, an edge provider only can reach a particular end user through his or her broadband provider. We thus reject suggestions that market forces will be sufficient to ensure that providers of broadband Internet access service do not act in a manner contrary to the public interest.

444. Against this backdrop we are unpersuaded by arguments seeking forbearance from sections 201 and 202 based on generalized arguments about marketplace developments, such as network investment or changes in performance or price per megabit, in the recent past. However, counterarguments in the record, longer-term trends, and our experience in the CMRS context where sections 201 and 202 have applied, leave us unpersuaded that the inapplicability of sections 201 and 202 were a prerequisite for any such marketplace developments. We are similarly unpersuaded by arguments comparing the U.S. broadband marketplace with those in Europe, given, among other things, the differences between the regulatory approach there and the regulatory framework that results from this Order. We thus find those arguments for forbearance sufficiently speculative and subject to debate that they do not overcome our public interest analysis above.

445. For these same reasons, we are not persuaded that application of sections 201 and 202 is not necessary to ensure just, reasonable, and nondiscriminatory conduct by broadband providers and for the protection of consumers under sections 10(a)(1) and (a)(2). As discussed above, applying these provisions enables us to protect customers of broadband Internet access service from potentially harmful conduct by broadband providers both by providing a basis for our open Internet rules and for the important statutory backstop they provide regarding broadband provider practices more generally.

446. We also observe that our forbearance decision as to sections 201

and 202 for broadband Internet access service is informed by the CMRS experience, where Congress specifically recognized the importance of sections 201 and 202 (along with section 208) in excluding those provisions from possible forbearance under section 332(c)(1)(A). Application of sections 201 and 202 has not frustrated investment in the wireless marketplace, nor has it led to ex ante regulation of rates charged to consumers for wireless voice service. Indeed, we find that the successful application of this legal framework in the CMRS context responds to the concerns of some commenters about the potential burdens, or uncertainty, resulting from the application of sections 201 and 202, which they contend could create disincentives for investment even standing alone and apart from ex ante rules. (While Verizon attempts to distinguish the CMRS experience by claiming that, unlike voice service, "broadband has never been subject to Title II," Verizon Jan. 26, 2015 Ex Parte Letter at 5, this is both factually incorrect for the reasons described above, nor does it meaningfully address the fact that the CMRS marketplace has seen substantial growth and investment under the regulatory framework that the Commission did apply.) Moreover, within their scope, our open Internet rules reflect our interpretation of how sections 201 and 202 apply, providing further guidance and addressing possible concerns about uncertainty regarding the application of sections 201 and 202. Beyond that, we are not persuaded that concerns about the burdens or uncertainty associated with sections 201 and 202 counsel in favor of a contrary public interest finding under section 10(a)(3), particularly given the very generalized concerns commenters raised.

447. Although some have argued that section 706 of the 1996 Act provides sufficient authority to adopt open Internet protections, and we do, in fact, conclude that section 706 provides additional support here, we nonetheless conclude that the application of sections 201 and 202 is appropriate to remove any ambiguity regarding our authority to enforce strong, clear open Internet rules. (For example, although we find that we have authority under section 706 of the 1996 Act to implement appropriate enforcement mechanisms, our reliance on sections 201 and 202 as additional sources of authority (coupled with the enforcement provisions from which we do not forbear, as discussed below), eliminates possible arguments to the contrary.) Further, comments focused

exclusively on section 706 authority neglect the direct role that sections 201 and 202 will play in the overall regulatory framework we adopt, with respect to practices for or in connection with broadband Internet access service that are not directly governed by our rules.

448. We are persuaded, in part, by arguments that we should forbear from sections 201 and/or 202 outside the open Internet context, although we reject calls to entirely forbear from applying sections 201 and 202 outside that context or that we otherwise adopt a more granular decision regarding forbearance from provisions in sections 201 and/or 202. While open Internet considerations have led the Commission to revisit its prior decisions, our ultimate classification decision here simply acknowledges the reality of how these services are being offered today. (We thus reject claims that we somehow are using forbearance to increase regulation. Rather, we are using it to tailor the regulatory regime otherwise applicable to these telecommunications services.) Having classified BIAS as a telecommunications service, we exercise our forbearance authority to establish a tailored Title II regulatory framework that adequately protects consumers, ensures just and reasonable broadband provider conduct, and furthers the public interest—consistent with our goals of more, better, and open broadband. In addition, insofar as commenters cite the same arguments about past network investment or changes in performance or price per megabit in the recent past that we discussed above, we again find them sufficiently speculative and subject to debate that they do not overcome our forbearance analysis for sections 201 and 202 above. Moreover, as we noted above, our decision not to forbear from applying sections 201 and 202 not only enables our open Internet regulatory framework but supports our grant of broad forbearance from other provisions and regulations, as discussed below. In particular, as discussed below, we find that our sections 201 and 202 authority provides a more flexible framework better suited to this marketplace than many of the alternative regulations that otherwise would apply.

449. Nor do commenters adequately explain how forbearance could be tailored in these ways, at least in the context of case-by-case adjudication. For broadband providers' interconnection practices, which are not covered by the open Internet rules we adopt today, we expressly rely on the backstop of sections 201 and 202 for case-by-case decision making. We also rely on both

sections 201 and 202 for conduct that is covered by the open Internet rules adopted here. Those rules reflect the Commission's interpretation of how sections 201 and 202 apply in that context, and thus the requirements of section 201 and 202 are coextensive as to broadband Internet access service covered by those rules. Commenters do not indicate, nor does the record otherwise reveal, an administrable way for the Commission to grant the requested partial forbearance while still pursuing such case-by-case decisions in the future. Further, while section 706 of the 1996 Act would remain, as well, we find that sections 201 and 202 provide a more certain foundation for evaluating providers' conduct and pursuing enforcement if warranted in relevant circumstances arising in the future. We thus are not persuaded that even these more limited proposals for forbearance from provisions in sections 201 and/or 202 as applied on a case-by-case basis would be in the public interest under section 10(a)(3).

450. Although we conclude that the section 10 criteria are not met with respect to the full scope of forbearance that these commenters seek, because we do not and cannot envision adopting new *ex ante* rate regulation of broadband Internet access service in the future, we forbear from applying sections 201 and 202 to broadband services to that extent. As described above, our approach here is informed by the success of the CMRS framework, which has not, in practice, involved ex ante rate regulation. In addition, as courts have recognized, when exercising its section 10 forbearance authority "[g]uided by section 706," the Commission permissibly may "decide[] to balance the future benefits" of encouraging broadband deployment "against [the] short term impact" from a grant of forbearance. Under the totality of the circumstances here, including the protections of our open Internet ruleswhich focus on what we identify and the most significant problems likely to arise regarding these broadband services-and our ability to address issues ex post under sections 201 and 202 we do not find ex ante rate regulations necessary for purposes of section 10(a)(1) and (a)(2). Further, guided by section 706, and reflecting the tailored regulatory approach we adopt in this item, we find it in the public interest to forbear from applying sections 201 and 202 insofar as they would support the adoption of *ex ante* rate regulations for broadband Internet access service in the future.

451. To the extent some commenters express concern about future rules that

the Commission might adopt based on this section 201 and 202 authority, we cannot, and do not, envision going beyond our open Internet rules to adopt ex ante rate regulations based on that section 201 and 202 authority in this context. Consequently, we forbear from sections 201 and 202 in that respect, as discussed above. In this Order, we decide only that forbearance from sections 201 and 202 of the Act to broadband Internet access service is not warranted under section 10 to the extent described above. Indeed, we find here that the application of sections 201 and 202 of the Act enable us to forbear from other requirements, including preexisting tariffing requirements and Commission rules governing rate regulation, which we find are not warranted here. Thus, any pre-existing rate regulations adopted by the Commission under its Title II authority—including any regulations adopted under sections 201 and 202will not be imposed on broadband Internet access service as a result of this Order. Finally, while other types of rules also potentially could be adopted based on section 201 and 202 authority, any Commission rules adopted in the future would remain subject to judicial review under the APA. (In this regard, commenters advocating forbearance from sections 201 and 202 to guard against new rules that the Commission might adopt pursuant to that authority do not meaningfully explain what incremental benefit that would achieve given that any future Commission proceeding would be required to adopt such rules in any case.)

2. Enforcement

452. We also retain certain fundamental Title II enforcement provisions, as well as the Commission's rules governing section 208 complaint proceedings. In particular, we decline to forbear from applying section 208 of the Act and the associated procedural rules, which provide a complaint process for enforcement of applicable provisions of the Act or any Commission rules. Section 208 permits "[a]ny person, any body politic, or municipal organization, or State commission, complaining of anything done or omitted to be done by any common carrier subject to this chapter in contravention of the provisions thereof" to file a complaint with the Commission and seek redress. We also retain additional statutory provisions that we find necessary to ensuring a meaningful enforcement process. In particular, we decline to forbear from sections 206, 207, and 209 as a necessary adjunct to the section 208 complaint process. As the Commission

has held previously, forbearing from sections 206, 207, and 209 "would eviscerate the protections of section 208" because "[w]ithout the possibility of obtaining redress through collection of damages, the complaint remedy is virtually meaningless." We similarly do not forbear from sections 216 and 217, which "merely extend the Title II obligations of [carriers] to their trustees, successors in interest, and agents. The sections were intended to ensure that a common carrier could not evade complying with the Act by acting through others over whom it has control or by selling its business." Thus, we decline to forbear from enforcing these key Title II enforcement provisions with respect to broadband Internet access service.

453. We find that forbearance from these key enforcement provisions and the associated procedural rules does not satisfy any of the section 10(a) criteria. As discussed above, we decline to forbear from enforcement of sections 201 and 202 as they apply to broadband Internet access service. To make application of these provisions meaningful, the possibility of enforcement needs to be available. Consequently, insofar as we find above that sections 201 and 202 are necessary to guard against unjust, unreasonable, or unjustly or unreasonably discriminatory conduct by broadband providers and to protect consumers, that presumes the viability of enforcement. For these same reasons, forbearance from these key Title II enforcement provisions would not be in the public interest. Thus, our conclusion that section 10(a) is not met as to these key Title II enforcement provisions builds on our prior conclusion to that effect as to sections 201 and 202. (Consistent with our analysis above, see supra para.447, although section 706 of the 1996 Act would remain, these Title II enforcement provisions provide a more certain foundation for pursuing enforcement if warranted in relevant circumstances arising in the future.)

454. In the event that a carrier violates its common carrier duties, the section 208 complaint process would permit challenges to a carrier's conduct, and many commenters advocate for section 208 to apply. The Commission's procedural rules establish mechanisms to carry out that enforcement function in a manner that is well-established and clear for all parties involved. The Commission has never previously forborne from section 208. Indeed, we find it instructive that in the CMRS context Congress specifically precluded the Commission from using section 332 to forbear from section 208. Commenters

also observe the important interrelationship between section 208 and sections 206, 207, 209, 216, and 217, which the Commission itself has recognized in the past, as discussed above. In addition, to forbear from sections 216 and 217 would create a loophole in our ability to evenly enforce the Act, which would imperil our ability to protect consumers and to protect against unjust or unreasonable conduct, and would be contrary to the public interest. The prospect that carriers may be forced to defend their practices before the Commission supports the strong public interest in ensuring the reasonableness and nondiscriminatory nature of those actions, protecting consumers, and advancing our overall public interest objectives. (For the reasons discussed above, we thus reject the assertions of some commenters that enforcement is unduly burdensome. In particular, we are not persuaded that such concerns outweigh the overarching interest advanced by the enforceability of sections 201 and 202. Nothing in the record demonstrates that our need for enforcement differs among broadband providers based on their size, and we thus are not persuaded that a different conclusion in our forbearance analysis should be reached in the case of small broadband providers, for example.) While some commenters express fears of "threats of abusive litigation" or other burdens arising from the application of these provision, other commenters correctly note the speculative nature of those arguments given the lack of evidence of such actions where those provisions historically have applied (including in the CMRS context). In hearing section 207 claims, courts have historically been careful to consider the Commission's views as a matter of primary jurisdiction on the reasonableness of a practice under section 201(b), both in general and before awarding damages under section 207. In a number of cases, courts have held that there is no entitlement to damages under section 207 for a claim under section 201(b) unless the Commission has already determined that a particular practice is "unreasonable." We endorse that approach here. At a minimum, we believe that courts reviewing BIAS practices under section 207 in the first instance should recognize the Commission's primary jurisdiction in a context such as this. The doctrine of primary jurisdiction is particularly important here, because the broadband Internet ecosystem is highly dynamic and the Commission has carefully

designed a regulatory framework for BIAS to protect Internet openness and other important communications network values without deterring broadband investment and innovation. As a result, for all of the forgoing reasons, we conclude that none of the section 10(a) criteria are met as to forbearance from these fundamental Title II enforcement provisions and the associated Commission procedural rules with respect to the broadband Internet access service.

C. Forbearance Analysis Specific to Broadband Internet Access Service

455. As discussed elsewhere, with respect to broadband Internet access service we find that the standard for forbearance is not met with respect to the following limited provisions:

(a) Sections 201, 202, and 208, along with the related enforcement provisions of sections 206, 207, 209, 216, and 217, and the associated complaint procedures; and the Commission's implementing regulations (but, to be clear, the Commission forbears from all ratemaking regulations adopted under sections 201 and 202);

(b) Section 222, which establishes core customer privacy protections;

(c) Section 224 and the Commission's implementing regulations, which grant certain benefits that will foster network deployment by providing telecommunications carriers with regulated access to poles, ducts, conduits, and rightsof-way;

(d) Sections 225, 255, and 251(a)(2), and the Commission's implementing regulations, which collectively advance access for persons with disabilities; except that the Commission forbears from the requirement that providers of broadband Internet access service contribute to the Telecommunications Relay Service (TRS) Fund at this time. These provisions and regulations support the provision of TRS and require providers of broadband Internet access service, as telecommunications carriers, to ensure that the service is accessible to and usable by individuals with disabilities, if readily achievable; and

(e) Section 254, the interrelated requirements of section 214(e), and the Commission's implementing regulations to strengthen the Commission's ability to support broadband, supporting the Commission's ongoing efforts to support broadband deployment and adoption; the Commission forbears from immediate contributions requirements, however, in light of the ongoing Commission proceeding.

456. We naturally also do not forbear from applying open Internet rules and section 706 of the 1996 Act itself. For convenience, we collectively refer to these provisions and regulations for purposes of this Order as the "core broadband Internet access service requirements."

457. Beyond those core broadband Internet access service requirements we **19814** Federal Register/Vol. 80, No. 70/Monday, April 13, 2015/Rules and Regulations

grant extensive forbearance as permitted by our authority under section 10 of the Act. As described in greater detail below, it is our predictive judgment that the statutory and regulatory requirements that remain are sufficient to ensure just, reasonable, and not unjustly or unreasonably discriminatory conduct by providers of broadband Internet access service and to protect consumers with respect to broadband Internet access service. Those same considerations, plus the overlay of section 706 of the 1996 Act and our desire to proceed incrementally when considering what new requirements that should apply here, likewise persuade us that this forbearance is in the public interest.

458. Our forbearance decision in this subsection focuses on addressing consequences arising from the classification decision in this Order regarding broadband Internet access service. (The 2014 Open Internet NPRM here did not contemplate possible forbearance from the open Internet rules themselves, and thus they are beyond the scope of regulations addressed by this forbearance decision. In any case, the very reasons that persuade us to adopt the rules in the Order likewise demonstrate that forbearance from those rules would not satisfy the section 10(a) criteria here.) Thus, we do not forbear with respect to requirements to the extent that they already applied prior to this Order without regard to the classification of broadband Internet access service. For example, as discussed in greater detail below, this includes things like certain requirements of the Twenty-First Century Communications and Video Accessibility Act of 2010 (CVAA), as well as things like liability-limitation provisions that do not vary in application based on the classification of broadband Internet access service. Similarly, to the extent that provisions or regulations apply to an entity by virtue of other services it provides besides broadband Internet access service, the forbearance in this Order does not extend to that context. (This Order does not alter any additional or broader forbearance previously granted that already might encompass broadband Internet access service in certain circumstances, for example, insofar as broadband Internet access service, when provided by mobile providers, is a CMRS service. As one example, the Commission has granted some forbearance from section 310(d) for certain wireless licensees that meet the definition of "telecommunications carrier," but section 310(d) is not itself

framed in terms of "common carriers" or "telecommunications carriers" or providers of ''CMRS'' or the like, nor is it framed in terms of "common carrier services," "telecommunications services," "CMRS services" or the like. To the extent that such forbearance thus goes beyond the forbearance for wireless providers granted in this Order, this Order does not narrow or otherwise modify that pre-existing grant of forbearance. For clarity, we observe, however, that the broadband Internet access service covered by our open Internet rules is beyond the scope of a petition for forbearance from Verizon regarding certain broadband services that was deemed granted by operation of law on March 19, 2006.)

459. In addition, prior to this Order some incumbent local exchange carriers or other common carriers chose to offer Internet transmission services as telecommunications services subject to the full range of Title II requirements. Our forbearance with respect to broadband Internet access service does not encompass such services. As a result, such providers remain subject to the rights and obligations that arise under Title II and the Commission's rules by virtue of their elective provision of such services, (For example, if a rate-of-return incumbent LEC (or other provider) voluntarily offers Internet transmission outside the forbearance framework adopted in this Order, it remains subject to the preexisting Title II rights and obligations, including those from which we forbear in this Order.) along with the rules adopted to preserve and protect the open Internet to the extent that those services fall within the scope of those rules. (If such a provider wants to change to offer Internet access services pursuant to the construct adopted in this Order, it should notify the Wireline Competition Bureau 60 days prior to implementing such a change.)

1. Provisions That Protect Customer Privacy, Advance Access for Persons With Disabilities, and Foster Network Deployment

460. We generally grant extensive forbearance from the provisions and requirements that newly apply by virtue of our classification of broadband Internet access service. However, the record persuades us that we should not forbear with respect to certain key provisions that protect customer privacy, advance access for persons with disabilities, and foster network deployment.

a. Customer Privacy (Section 222)

461. As supported by a number of commenters, we decline to forbear from applying section 222 of the Act in the case of broadband Internet access service. We do, however, find the section 10(a) criteria met to forbear at this time from applying our implementing rules, pending the adoption of rules to govern broadband Internet access service in a separate rulemaking proceeding. Section 222 of the Act governs telecommunications carriers' protection and use of information obtained from their customers or other carriers, and calibrates the protection of such information based on its sensitivity. Congress provided protections for proprietary information, according the category of customer proprietary network information (CPNI) the greatest level of protection. Section 222 imposes a duty on every telecommunications carrier to protect the confidentiality of its customers' private information. Section 222 also imposes restrictions on carriers' ability to use, disclose, or permit access to customers' CPNI without their consent.

462. We find that forbearance from the application of section 222 with respect to broadband Internet access service is not in the public interest under section 10(a)(3), and that section 222 remains necessary for the protection of consumers under section 10(a)(2). The Commission has long supported protecting the privacy of users of advanced services, and retaining this provision thus is consistent with the general policy approach. The Commission has emphasized that "[c]onsumers' privacy needs are no less important when consumers communicate over and use broadband Internet access than when they rely on [telephone] services." As broadband Internet access service users access and distribute information online, the information is sent through their broadband provider. Broadband providers serve as a necessary conduit for information passing between an Internet user and Internet sites or other Internet users, and are in a position to obtain vast amounts of personal and proprietary information about their customers. Absent appropriate privacy protections, use or disclosure of that information could be at odds with those customers' interests.

463. We find that if consumers have concerns about the privacy of their personal information, such concerns may restrain them from making full use of broadband Internet access services and the Internet, thereby lowering the likelihood of broadband adoption and decreasing consumer demand. As the Commission has found previously, the protection of customers' personal information may spur consumer demand for those services, in turn "driving demand for broadband connections, and consequently encouraging more broadband investment and deployment" consistent with the goals of the 1996 Act. Notably, commenters opposing the application of section 222 to broadband Internet access service make general arguments about the associated burdens, but do not include a meaningful analysis of why the section 10(a) criteria are met (or why relief otherwise should be granted) nor why the concerns they identify-even assuming arguendo that they were borne out by evidence beyond that currently in the record—should outweigh the privacy concerns identified here. We therefore conclude that the application and enforcement of section 222 to broadband Internet access services is in the public interest, and necessary for the protection of consumers. (We are not persuaded that those arguments justify a different outcome here, both for the reasons discussed previously, and because commenters do not meaningfully explain how these arguments impact the section 10 analysis here, given that the need to protect consumer privacy is not selfevidently linked to such marketplace considerations. Nothing in the record suggests that concerns about consumer privacy are limited to broadband providers of a particular size, and we thus are not persuaded that a different conclusion in our forbearance analysis should be reached in the case of small broadband providers, for example.)

464. We also reject arguments that section 706 itself provides adequate protections such that forbearance from section 222 is warranted. While section 706 of the 1996 Act would continue to apply even if we granted forbearance here, we find that section 222 provides a more certain foundation for evaluating providers' conduct and pursuing enforcement if warranted in relevant circumstances arising in the future. (We also note, for example, that this approach obviates the need to determine whether or to what extent section 222 is more specific than section 706 of the 1996 Act in relevant respects, and thus could be seen as exclusively governing over the provisions of section 706 of the 1996 Act as to some set of privacy issues. The approach we take avoids this potential uncertainty, and we thus need not and do not address this question.) Among other things, while

the concerns discussed in the preceding paragraph have a nexus with the standards of sections 706(a) and (b), as discussed earlier in this section, the public interest in protecting customer privacy is not limited to the universe of concerns encompassed by section 706.

465. We recognize that some commenters, while expressing concern about consumer privacy, nonetheless suggest that the Commission conceivably need not immediately apply section 222 and its implementing rules, pending further proceedings. (While CDT references the questions regarding the application of section 222 and our implementing rules raised in the 2010 Broadband Classification NOI, that NOI cited reasons why the Commission might immediately apply section 222 and the Commission's implementing rules if it reclassified broadband Internet access service as well as reasons why it might defer the application of those requirements. We thus find that the 2010 NOI does not itself counsel one way or the other, and in light of the record here, we decline to defer the application of section 222) We are persuaded by those arguments, but only as to the Commission's rules. With respect to the application of section 222 of the Act itself, as discussed above, with respect to broadband Internet access service the record here persuades us that the section 10(a) forbearance criteria are not met to justify such relief. Indeed, even as to services that historically have been subject to section 222, questions about the application of those privacy requirements can arise and must be dealt with by the Commission as technology evolves, and the record here does not demonstrate specific concerns suggesting that Commission clarification of statutory terms as needed would be inadequate in this context.

466. We are, however, persuaded that the section 10(a) criteria are met for us to grant forbearance from applying our rules implementing section 222 insofar as they would be triggered by the classification of broadband Internet access service here. Beyond the core broadband Internet access service requirements, we apply section 222 of the Act, which itself directly provides important privacy protections. Further, on this record, we are not persuaded that the Commission's current rules implementing section 222 necessarily would be well suited to broadband Internet access service. The Commission fundamentally modified these rules in various ways subsequent to decisions classifying broadband Internet access service as an information service, and certain of those rules appear more

focused on concerns that have been associated with voice service. For example, the current rules have requirements with respect to "call detail information," defined as "[a]ny information that pertains to the transmission of specific telephone calls, including, for outbound calls, the number called, and the time, location, or duration of any call and, for inbound calls, the number from which the call was placed, and the time, location, or duration of any call." More generally, the existing CPNI rules do not address many of the types of sensitive information to which a provider of broadband Internet access service is likely to have access, such as (to cite just one example) customers' web browsing history. Insofar as rules focused on addressing problems in the voice service context are among the central underpinnings of our CPNI rules, we find the better course to be forbearance from applying all of our CPNI rules at this time. As courts have recognized, when exercising its section 10 forbearance authority "[g]uided by section 706," the Commission permissibly may "decide[] to balance the future benefits" of encouraging broadband deployment "against [the] short term impact" from a grant of forbearance. In light of the record here and given that the core broadband Internet access requirements and section 222 itself will apply, and guided by section 706, we find that applying our current rules implementing sections 222—which, in critical respects, appear to be focused on addressing problems that historically arise regarding voice service-is not necessary to ensure just and reasonable rates and practice or for the protection of consumers under sections 10(a)(1) and (a)(2) and that forbearance is in the public interest under section 10(a)(3). We emphasize, however, that forbearance from our existing CPNI rules in the context of broadband Internet access services does not in any way diminish the applicability of these rules to services previously found to be within their scope.

b. Disability Access Provisions (Sections 225, 255, 251(a)(2))

467. We agree with commenters that we should apply section 225 and the Commission's implementing rules rather than forbear for broadband Internet access service—because of the need to ensure meaningful access to all Americans, except to the extent provided below with respect to contributions to the Interstate TRS Fund. Section 225 mandates the availability of interstate and intrastate TRS to the extent possible and in the most efficient manner to individuals in the United States who are deaf, hard of hearing, deaf-blind, and who have speech disabilities. The Act directs that TRS provide the ability for such individuals to engage in communication with other individuals, in a manner that is "functionally equivalent to the ability of a hearing individual who does not have a speech disability to communicate using voice communication services.' To achieve this, the Commission has required all interstate service providers (other than one-way paging services) to provide TRS. People who are blind, hard of hearing, deaf-blind, and who have speech disabilities increasingly rely upon Internet-based video communications, both to communicate directly (point-to-point) with other persons who are deaf or hard of hearing who use sign language and through video relay service (VRS) with individuals who do not use the same mode of communication that they do. In doing so, they rely on high definition two-party or multiple-party video conferencing that necessitates a broadband connection. As technologies advance, section 225 maintains our ability to ensure that individuals who are deaf, hard of hearing, deaf-blind, and who have speech disabilities can engage in service that is functionally equivalent to the ability of a hearing individuals who do not have speech disabilities to use voice communication services. Limits imposed on bandwidth use through network management practices that might otherwise appear neutral, could have an adverse effect on iTRS users who use sign language to communicate by degrading the underlying service carrying their video communications. The result could potentially deny these individuals functionally equivalent communications service. Additionally, if VRS and other iTRS users are limited in their ability to use Internet service or have to pay extra for iTRS and point-to-point services, this could cause discrimination against them because for many such individuals, TRS is the only form of communication that affords service that is functionally equivalent to what voice users have over the telephone. Moreover, limiting their bandwidth capacity could compromise their ability to obtain access to emergency services via VRS and other forms of iTRS, which is required by the Commission's rules implementing section 225.

468. While we base the open Internet rules adopted here solely on section 706 of the 1996 Act and other provisions of the Act besides section 225—and thus

do not adopt any new section 225-based rules in this Order—largely preserving this provision is important not only to the extent that it might be used in the future as the basis for new rules adopting additional protections but also to avoid any inadvertent uncertainty regarding Internet-based TRS providers' obligations under existing rules. To be compensated from the federal TRS fund, providers must provide service in compliance with section 225 and the Commission's TRS rules and orders. As discussed in the prior paragraph, however, a number of TRS services are carried via users' broadband Internet access services. Forbearing from applying section 225 and our TRS service requirements would risk creating loopholes in the protections otherwise afforded users of iTRS services or even just uncertainty that might result in degradation of iTRS. More specifically, if we forbear from applying these provisions, we run the risk of allowing actions taken by Internet access service providers to come into conflict with the overarching goal of section 225, i.e., ensuring that the communication services made available through TRS are functionally equivalent, that is, mirror as closely as possible the voice communication services available to the general public. Enforcement of this functional equivalency mandate will protect against such degradation of service. In sum, with the exception of TRS contribution requirements discussed below, we find that the enforcement of section 225 is necessary for the protection of consumers under section 10(a)(2), and that forbearance would not be in the public interest under section 10(a)(3).

469. Notwithstanding the foregoing, for now we do forbear in part from the application of TRS contribution obligations that otherwise would newly apply to broadband Internet access service. Section 225(d)(3)(B) and our implementing rules require federal TRS contributions for interstate telecommunications services, which now would uniformly include broadband Internet access service by virtue of the classification decision in this order. Applying new TRS contribution requirements on broadband Internet access potentially could spread the base of contributions to the TRS Fund, having the benefit of adding to the stability of the TRS Fund. Nevertheless, before taking any steps that would depart from the status quo in this regard, the Commission would like to assess the need for such additional funding, and the appropriate

contribution level, given the totality of concerns implicated in this context. As courts have recognized, when exercising its section 10 forbearance authority "[g]uided by section 706," the Commission permissibly may "decide[] to balance the future benefits" of encouraging broadband deployment "against [the] short term impact" from a grant of forbearance. Our decision, guided by section 706, to tailor the regulations applied to broadband Internet access service thus tips the balance in favor of the finding that applying new TRS fund contribution requirements at this time is not necessary to ensure just, reasonable and nondiscriminatory conduct by the provider of broadband Internet access service or for the protection of consumers under sections 10(a)(1) and (a)(2) and that forbearance is in the public interest under section 10(a)(3). The competing considerations here make this a closer call under our section 10(a) analysis, however, and thus we limit our action only to forbearing from applying section 225(d)(3)(B) and our implementing rules insofar as they would immediately require new TRS contributions from broadband Internet access services but not insofar as they authorize the Commission to require such contributions should the Commission elect to do so in a rulemaking in the future. In particular, we find it in the public interest to limit our forbearance in this manner to enable us to act even more nimbly in the future should we need to do so based on future developments.

470. Nothing in our forbearance from TRS Fund contribution requirements for broadband Internet access service is intended to encompass, however, situations where incumbent local exchange carriers or other common carriers voluntarily choose to offer Internet transmission services as telecommunications services subject to the full scope of Title II requirements for such services. As a result, such providers remain subject to the Interstate TRS Fund contribution obligations that arise under section 225 and the Commission's rules by virtue of their elective provision of such services until such time as the Commission further addresses such contributions in the future.

471. Consistent with some commenters' proposals, with respect to broadband Internet access service we also do not forbear from applying sections 255 and the associated rules, which require telecommunications service providers and equipment manufacturers to make their services and equipment accessible to individuals with disabilities, unless not readily achievable. We also do not find the statutory forbearance test met for related protections afforded under section 251(a)(2) and our implementing rules, which precludes the installation of "network features, functions, or capabilities that do not comply with the guidelines and standards established pursuant to section 255." We therefore do not forbear from this provision and our associated rules. In prior proceedings, the Commission has emphasized its commitment to implementing the important policy goals of section 255 in the Internet service context. Evidence cited in the National Broadband Plan also demonstrated that, while broadband adoption has grown steadily, it "lags considerably" among certain groups, including individuals with disabilities. Adoption of Internet access services by persons with disabilities can enable these individuals to achieve greater productivity, independence, and integration into society in a variety of ways. (Moreover, broadband can make telerehabilitation services possible, by providing long-term health and vocational support within the individual's home. Broadband can also provide increased access to online education classes and digital books and will offer real time interoperable voice, video and text capabilities for E911. In addition, as commenters note, "society as a whole'' can ''benefit[] when people with disabilities have access to [broadband Internet access] services in a manner equivalent to the non-disabled population." CFILC Dec. 17, 2014 Ex Parte Letter at 1.) These capabilities, however, are not available to persons with disabilities if they face barriers to Internet service usage, such as inaccessible hardware, software, or services. We anticipate that increased adoption of services and technologies accessible to individuals with disabilities will, in turn, spur further availability of such capabilities, and of Internet access services more generally.

472. Our forbearance analysis regarding sections 255, 251(a)(2), and our implementing rules also is informed by the incremental nature of the requirements imposed. In particular, the Twenty-First Century Communications and Video Accessibility Act of 2010 (CVAA), expanding beyond the thenexisting application of section 255, adopted new section 716 of the Act, which requires that providers of advanced communications services (ACS) and manufacturers of equipment used for ACS make their services and products accessible to people with

disabilities, unless it is not achievable to do so. These mandates already apply according to their terms in the context of broadband Internet access service. The CVAA also adopted a requirement, in section 718, that ensures access to Internet browsers in wireless phones for people who are blind and visually impaired. In addition, the CVAA directs the Commission to enact regulations to prescribe, among other things, that networks used to provide ACS "may not impair or impede the accessibility of information content when accessibility has been incorporated into that content for transmission through . . . networks used to provide [ACS]." Finally, new section 717 creates new enforcement and recordkeeping requirements applicable to sections 255, 716, and 718. Thus, a variety of accessibility requirements already have applied in the context of broadband Internet access service under the CVAA.

473. We are persuaded by the record of concerns about accessibility in the context of broadband Internet access service that we should not rest solely on the protections of the CVAA, however. But we do clarify the interplay of those provisions. At the time of section 255's adoption in the 1996 Act, Congress stated its intent to "foster the design, development, and inclusion of new features in communications technologies that permit more ready accessibility of communications technology by individuals with disabilities . . . as preparation for the future given that a growing number of Americans have disabilities." More recently, Congress adopted the CVAA after recognizing that since it added section 255 to the Communications Act, "Internet-based and digital technologies . . . driven by growth in broadband . . . are now pervasive, offering innovative and exciting ways to communicate and share information." Congress thus clearly had Internet-based communications technologies in mind when enacting the accessibility provisions of sections section 716 (as well as the related provisions of sections 717 through 718), and in providing important protections with respect to ACS. Thus, insofar as there is any conflict between the requirements of sections 255, 251(a)(2), and our implementing rules, on the one hand, and sections 716 through 718 and our implementing rules on the other hand, we interpret the latter requirements as controlling. On the other hand, insofar as sections 255, 251(a)(2), and our implementing rules impose different requirements that are reconcilable with the CVAA, we find it appropriate to

apply those additional protections in the context of broadband Internet access service for the reasons described above. (We recognize that the Commission previously has held that "[s]ection 2(a) of the CVAA exempts entities, such as Internet service providers, from liability for violations of section 716 when they are acting only to transmit covered services or to provide an information location tool. Thus, service providers that merely provide access to an electronic messaging service, such as a broadband platform that provides an end user with access to a web-based email service, are excluded from the accessibility requirements of section 716." Our decision here is not at odds with Congress' approach to such services under the CVAA, however, because we also have found that "relative to section 255, section 716 requires a higher standard of achievement for covered entities." Thus, under our decision here, broadband Internet access service will remain excluded from the "higher standard of achievement" required by the CVAA to the extent provided by that law, and instead will be subject to the lower standard imposed under section 255 in those cases where the CVAA does not apply.) Thus, for example, outside the self-described scope of the CVAA, providers of broadband Internet access services must ensure that network services and equipment do not impair or impede accessibility pursuant to the sections 255/251(a)(2) framework. (Because this section requires pass through of telecommunications in an accessible format, and 47 CFR 14.20(c) requires pass through of ACS in an accessible format, the two sections work in tandem with each other, and forbearance from sections 255 and 251(a)(2) would therefore result in a diminution of accessibility.) In particular, we find that these provisions and regulations are necessary for the protection of consumers and forbearance would not be in the public interest. (We recognize that section 716 provides that "[t]he requirements of this section shall not apply to any equipment or services, including interconnected VoIP service, that are subject to the requirements of section 255 of this title on the day before October 8, 2010. Such services and equipment shall remain subject to the requirements of section 255 of this title." 47 U.S.C. 617(f). We do not read that as requiring that section 716 must necessarily be mutually exclusive with section 255, however. Had Congress wished to achieve that result, it easily instead could have stated that "the

requirements of this section shall not apply to any equipment or services . . that are subject to the requirements of section 255" (or vice versa) and left it at that. By also including the limiting language "that are subject to the requirements of section 255 of this title on the day before October 8, 2010," we believe the statute reasonably is interpreted as leaving open the option that services that become subject to section 255 thereafter also could be subject to both the requirements of section 255 and the requirements of the CVAA. Indeed, although broadband Internet access previously was classified as an information service and thus not subject to section 255 on October 8, 2010, at the time the CVAA was enacted the Commission had initiated the 2010 NOI to consider whether to reclassify that service as a telecommunications service, which would, at that time, become subject to section 255 as a default matter.)

474. We reject the cursory or generalized arguments of some commenters that we need not apply these protections, or that we might defer doing so, pending further proceedings. For the reasons discussed above, with respect to broadband Internet access service the record here persuades us that the application of these requirements is necessary for the protection of consumers under section 10(a)(2) and that forbearance is not in the public interest under section 10(a)(3). Nor are we otherwise persuaded to stay or waive our implementing rules based on this record. Commenters opposing the application of these protections with respect to broadband Internet access service either with no limit on time, or specifically in the near term, make general arguments about the associated burdens. However, they do not include a meaningful analysis of why the section 10(a) criteria are met (or why relief otherwise should be granted) nor why the concerns they identify-even assuming *arguendo* that they were borne out by evidence beyond that currently in the record-should outweigh the disability access concerns identified here. (Some commenters contend that the Commission should forbear from all of Title II based on generalized arguments about the marketplace, such as past network investment or changes in performance or price per megabit in the recent past. We are not persuaded that those arguments justify a different outcome as to any of the disability access provisions or requirements at issue in this section, both for the reasons discussed previously, and

because commenters do not meaningfully explain how these arguments impact the section 10 analysis here, given that the need to protect disability access is not selfevidently linked to such marketplace considerations. Nothing in the record suggests that concerns about disability access are limited to broadband providers of a particular size, and we thus are not persuaded that a different conclusion in our forbearance analysis should be reached in the case of small broadband providers, for example.)

475. We also reject arguments that section 706 itself provides adequate protections such that forbearance from the disability access provisions of sections 225, 255 and 251(a)(2) and associated regulations is warranted. While section 706 of the 1996 Act would continue to apply even if we granted forbearance here, consistent with our conclusions in other sections, we find that these disability access provisions provide a more certain foundation for evaluating providers' conduct and pursuing enforcement if warranted in relevant circumstances arising in the future. (We also note, for example, that this approach obviates the need to determine whether or to what extent these disability access provisions are more specific than section 706 of the 1996 Act in relevant respects, and thus could be seen as exclusively governing over the provisions of section 706 of the 1996 Act as to some set of disability access issues. The approach we take avoids this potential uncertainty, and we thus need not and do not address this question.) Among other things, while our interest in ensuring disability access often may have a nexus with the standards of sections 706(a) and (b), the record does not reveal that the public interest in ensuring access for persons with disabilities is limited just to the universe of concerns encompassed by section 706.

476. In addition to the provisions discussed above, section 710 of the Act addresses hearing aid compatibility. Given the important additional protections for persons with disabilities enabled by this provision, (For reasons similar to those discussed in the text above regarding other disability access provisions, we do not find it in the public interest to grant forbearance from section 710 of the Act, nor do we find such forbearance otherwise warranted under the section 10(a) criteria.) we anticipate addressing the applicability of mobile wireless hearing aid compatibility requirements to mobile broadband Internet access service devices in the pending rulemaking proceeding. (We note that the

Commission's existing implementing rules do not immediately impose the Commission's hearing aid compatibility requirements implementing section 710 of the Act on mobile wireless broadband providers by virtue of the classification decisions in this Order. We note, however, that certain obligations in the Commission's rules implementing section 255 addressing interference with hearing technologies and the effective wireless coupling to hearing aids, may be appropriately imposed on such providers by virtue of this Order, given our decision not to forbear from application of section 255 and its implementing regulations.)

c. Access to Poles, Ducts, Conduit and Rights-of-Way (section 224)

477. Consistent with the recommendations of certain broadband provider commenters, because we find that the section 10(a) criteria are not met, we decline to forbear from applying section 224 and the Commission's associated rules with respect to broadband Internet access service. Section 224 of the Act governs the Commission's regulation of pole attachments. The Commission has recognized repeatedly the importance of pole attachments to the deployment of communications networks, and we thus conclude that applying these provisions will help ensure just and reasonable rates for broadband Internet access service by continuing pole access and thereby limiting the input costs that broadband providers otherwise would need to incur. Leveling the pole attachment playing field for new entrants that offer solely broadband services also removes barriers to deployment and fosters additional broadband competition. For similar reasons we find that applying these provisions will protect consumers and advance the public interest under sections 10(a)(2) and (a)(3). (Some commenters contend that the Commission should forbear from all of Title II based on generalized arguments about the marketplace, such as past network investment or changes in performance or price per megabit in the recent past. We are not persuaded that those arguments justify a different outcome regarding section 224 and our associated rules, both for the reasons discussed previously, and because commenters do not meaningfully explain how these arguments impact the section 10 analysis here, given that the need for regulated access to access to poles, ducts, conduit, and rights-of-way is not self-evidently linked to such marketplace considerations. Nor does the record reveal that concerns about

adequate access to poles, ducts, conduit and rights-of-way are limited to broadband providers of a particular size, and we thus are not persuaded that these concerns would differ in the case of small broadband providers, for example.)

478. Further, in significant part, section 224 imposes obligations on utilities, as owners of poles, ducts, conduits, or rights-of-way, to ensure that cable operators and telecommunications carriers obtain access to poles on just, reasonable, and nondiscriminatory rates, terms and conditions. The definition of a utility, however, includes entities other than telecommunications carriers, and pole attachments themselves are not

"telecommunications services." Section 10 allows the Commission to forbear from statutory requirements and implementing regulations as applied to "a telecommunications carrier or telecommunications service," or class thereof, if the statutory criteria are satisfied. To the extent that section 224 imposes obligations on entities other than telecommunications carriers, it is not within the Commission's authority to forbear from this provision and our implementing rules under section 10.

479. Moreover, even if the Commission could forbear from the entirety of section 224 notwithstanding the concerns with such forbearance noted above, it is doubtful that this approach would leave us with authority to regulate the rates for attachments used for broadband Internet access service. In particular, such forbearance seemingly would eliminate any requirements governing pole owners' rates for access to poles by telecommunications carriers or cable operators. Such an outcome would not serve the public interest.

480. We also are not persuaded that we could forbear exclusively from the telecom rate formula in section 224(e), and then adopt a lower rate—such as the cable rate—pursuant to section 224(b). In particular, applying the 'specific governs the general' canon of statutory interpretation, the Supreme Court interpreted the rate formulas in sections 224(d) and (e) as controlling, within their self-described scope, over the Commission's general authority to ensure just and reasonable rates for pole attachments under section 224(b). We question whether forbearing from applying section 224(e) would actually alter the scope of our authority under section 224(b), or if instead rates for carriers' telecommunications service attachments would remain governed by the (now forborne-from) section 224(e), leaving a void as to regulation of rates

for such attachments. Further, attempting to use an approach like this to regulate pole rental rates more stringently to achieve lower rates, the Commission seemingly would be using forbearance to *increase* regulation. Given the deregulatory purposes underlying the adoption of section 10, we do not believe that the use of forbearance in that manner would be in the public interest.

481. Although we are not persuaded that forbearance would be appropriate to address these concerns, we are committed to avoiding an outcome in which entities misinterpret today's decision as an excuse to increase pole attachment rates of cable operators providing broadband Internet access service. To be clear, it is not the Commission's intent to see any increase in the rates for pole attachments paid by cable operators that also provide broadband Internet access service, and we caution utilities against relying on this decision to that end. This Order does not itself require any party to increase the pole attachment rates it charges attachers providing broadband Internet access service, and we would consider such outcomes unacceptable as a policy matter.

482. We note in this regard that in the 2011 Pole Attachment Order, the Commission undertook comprehensive reform of pole attachment rulesincluding by revising the telecommunications rate formula for pole attachments in a way that 'generally will recover the same portion of pole costs as the current cable rate." As NCTA, COMPTEL and tw telecom observed following that Order, the Commission's "expressed intent of providing rate parity between telecommunications providers and cable operators by amending the telecommunications formula to produce rates comparable to the cable formulathereby removing the threat of potential rate increases associated with new services and reducing the incentives for pole owners to dispute the legal classification of communications services-will provide much-needed regulatory certainty that will permit broadband providers to extend their networks to unserved communities while fairly compensating pole owners." However, these parties also expressed concern that the particular illustration used by the Commission in the rule text could be construed as suggesting that the new formula includes only instances where there are three and five attaching entities, rather than providing the "corresponding cost adjustments scaled to other entity counts." We are concerned by any

potential undermining of the gains the Commission achieved by revising the pole attachment rates paid by telecommunications carriers. We accordingly will be monitoring marketplace developments following this Order and can and will promptly take further action in that regard if warranted.

483. To the extent that there is a potential for an increase in pole attachment rates for cable operators that also provide broadband Internet access service, we are highly concerned about its effect on the positive investment incentives that arise from new providers' access to pole infrastructure. We are encouraged by entry into the marketplace of parties that offer broadband Internet access service, and we believe that providing these new parties with access to pole infrastructure under section 224 would outweigh any hypothetical rise in pole attachment rates for some incumbent cable operators in some circumstances —particularly in light of our expressed intent to take prompt action if necessary to address the application of the Commission's pole rental rate formulas in a way that removes any doubt concerning the advancement of the goals intended by our 2011 reforms. Moreover, subsumed within our finding that today's decision does not justify any increase in pole attachment rates is an emphatic conclusion that no utility could impose any increase retroactively.

484. We also reject arguments that section 706 itself provides adequate protections such that forbearance from the pole access provisions of section 224 and related regulations is warranted. While section 706 of the 1996 Act would continue to apply even if we granted forbearance here, consistent with our conclusions in other sections, we find that section 224 and our implementing regulations provide a more certain foundation for evaluating providers' conduct and pursuing enforcement if warranted in relevant circumstances arising in the future. (We also note, for example, that this approach obviates the need to determine whether or to what extent section 224's pole access provisions are more specific than section 706 of the 1996 Act in relevant respects, and thus could be seen as exclusively governing over the provisions of section 706 of the 1996 Act as to some set of pole access issues. The approach we take avoids this potential uncertainty, and we thus need not and do not address this question.)

d. Universal Service Provisions (sections 254, 214(e))

485. We find the statutory test is met to grant certain forbearance under section 10(a) from applying sections 254(d), (g), and (k), as discussed below, but we otherwise will apply section 254, section 214(e) and our implementing rules with respect to broadband Internet access service, as recommended by a number of commenters. Section 254, the statutory foundation of our universal service programs, requires the Commission to promote universal service goals, including "[a]ccess to advanced telecommunications and information services . . . in all regions of the Nation." Section 214(e) provides the framework for determining which carriers are eligible to participate in universal service programs. Even prior to the classification of broadband Internet access service adopted here, the Commission already supported broadband services to schools, libraries, and health care providers and supported broadband-capable networks in highcost areas. Broadband Internet access service was, and is, a key focus of those universal service policies, and classification today simply provides another statutory justification in support of these policies going forward. Under our broader section 10(a)(3) public interest analysis, the historical focus of our universal service policies on advancing end-users' access to broadband Internet access service persuades us to give much less weight to arguments that we should proceed incrementally in this context. In particular, the Commission already has provided support for deployment of broadband-capable networks and imposed associated public interest obligations requiring the provision of broadband Internet access service. In connection with the Lifeline program, for instance, the Commission has established the goal of "ensuring the availability of broadband service for low-income Americans." We therefore conclude that these universal service policy-making provisions of section 254, and the interrelated requirements of section 214(e), give us greater flexibility in pursuing those policies, and outweighs any limited incremental effects (if any) on broadband providers in this context. (We note that commenters opposing the application of section 254 as a whole (or those provisions of section 254 from which we do not forbear below) or arguing that such action could be deferred pending future proceedings, appear to make only generalized, non-specific arguments, which we do not find sufficient to

overcome our analysis above. In addition, some commenters contend that the Commission should forbear from all of Title II based on generalized arguments about the marketplace, such as past network investment or changes in performance or price per megabit in the recent past. We are not persuaded that those arguments justify a different outcome regarding section 254, both for the reasons discussed previously, and because commenters do not meaningfully explain how these arguments impact the section 10 analysis here, given that, even taken at face value, arguments based on such marketplace considerations do not purport to sufficiently address the policy concerns underlying section 254 and our universal service programs. Nothing in the record suggests that we should tailor our advancement of universal service policies to broadband providers of a particular size, and we thus are not persuaded that a different conclusion in our forbearance analysis should be reached in the case of small broadband providers, for example.) Because forbearance would not be in the public interest under section 10(a)(3), we apply these provisions of section 254 and 214(e) and our implementing rules with respect to broadband Internet access service.

486. We also reject arguments that section 706 itself provides adequate protections such that forbearance from the provisions of sections 254 and 214(e) discussed above is warranted. While section 706 of the 1996 Act would continue to apply even if we granted forbearance here, we find that these provisions provide a more certain foundation for implementing our universal service policies and enforcing our associated rules, consistent with our conclusions in other sections. (We also note, for example, that this approach obviates the need to determine whether or to what extent these universal service provisions are more specific than section 706 of the 1996 Act in relevant respects, and thus could be seen as exclusively governing over the provisions of section 706 of the 1996 Act as to some set of universal issues. The approach we take avoids this potential uncertainty, and we thus need not and do not address this question.) Among other things, while our interest in ensuring universal service often may have a nexus with the standards of sections 706(a) and (b), the record does not reveal that the public interest in ensuring universal access is limited just to the universe of concerns encompassed by section 706.

487. Notwithstanding the foregoing, for now we do forbear in part from the

first sentence of section 254(d) and our associated rules insofar as they would immediately require new universal service contributions associated with broadband Internet access service. The first sentence of section 254(d) authorizes the Commission to impose universal service contributions requirements on telecommunications carriers—and, indeed, goes even further to require "[e]very telecommunications carrier that provides interstate telecommunications services" to contribute. (In implementing that statutory provision, the Commission concluded that federal contributions would be based on end-user telecommunications revenues.) Under that provision and our implementing rules, providers are required to make federal universal service support contributions for interstate telecommunications services, which now would include broadband Internet access service by virtue of the classification decision in this order.

488. Consistent with our analysis of TRS contributions above, we note that on one hand, newly applying universal service contribution requirements on broadband Internet access service potentially could spread the base of contributions to the universal service fund, providing at least some benefit to customers of other services that contribute, and potentially also to the stability of the universal service fund through the broadening of the contribution base. We note, however, that the Commission has sought comment on a wide range of issues regarding how contributions should be assessed, including whether to continue to assess contributions based on revenues or to adopt alternative methodologies for determining contribution obligations. (Moreover, the Commission has referred the question of how the Commission should modify the universal service contribution methodology to the Federal-State Joint Board on Universal Service (Joint Board) and requested a recommended decision by April 7, 2015. We recognize that a short extension of that deadline for the Joint Board to make its recommendation to the Commission may be necessary in light of the action we take today. Our action in this Order thus will not "short circuit" the rulemaking concerning contributions issues as some commenters fear.) We therefore conclude that limited forbearance is warranted at the present time in order to allow the Commission to consider the issues presented based on a full record in that docket. (As noted below, we do not forbear from the mandatory

obligation of carriers that have chosen voluntarily to offer broadband as a Title II service to contribute to the federal universal service fund. Because we do nothing today to disturb the status quo with respect to current contributions obligations for the reasons explained above, and there will be a future opportunity to consider these issues in the contributions docket, we find that certain arguments raised in the record today are better taken up in that proceeding.)

489. As reiterated in our discussion of TRS contributions above, courts have recognized when exercising its section 10 forbearance authority "[g]uided by section 706," the Commission permissibly may "decide[] to balance the future benefits" of encouraging broadband deployment "against [the] short term impact" from a grant of forbearance. Our decision, guided by section 706, to tailor the regulations applied to broadband Internet access service thus tips the balance in favor of the finding that applying new universal service fund contribution requirements at this time is not necessary to ensure just and reasonable rates and practices or for the protection of consumers under sections 10(a)(1) and (a)(2), and that forbearance is in the public interest under section 10(a)(3) while the Commission completes its pending rulemaking regarding contributions reform. (While some commenters cite regulatory parity as a reason not to forbear from universal service contribution requirements, they do not explain how such concerns are implicated insofar as every provider's broadband Internet access service is subject to this same forbearance from universal service contribution requirements. In any event, those arguments are better addressed in the contributions rulemaking docket based on the full record developed therein) The competing considerations here make this a closer call under our section 10(a) analysis, however, and thus as in the TRS contribution context, we limit our action only to forbearing from applying the first sentence of section 254(d) and our implementing rules insofar as they would immediately require new universal service contributions for broadband Internet access services sold to end users but not insofar as they authorize the Commission to require such contributions in a rulemaking in the future. Thus, while broadband Internet access services will not be subject to new universal service contributions at this time, our action today is not intended to prejudge or limit how the

Commission may proceed in the future. (Because our action today precludes for the time being federal universal service contribution assessments on broadband Internet access services that are not currently assessed, we conclude that any state requirements to contribute to state universal service support mechanisms that might be imposed on such broadband Internet access services would be inconsistent with federal policy and therefore are preempted by section 254(f)—at least until such time that the Commission rules on whether to require federal universal service contributions by providers of broadband Internet access service. We note that we are not aware of any current state contribution obligation for broadband Internet access service; our understanding is that broadband providers that voluntarily offer Internet transmission as a Title II service treat 100 percent of those revenues as interstate. We recognize that section 254 expressly contemplates that states will take action to preserve and advance universal service, and our actions in this regard will benefit from further deliberation.)

490. Nothing in our forbearance with respect to the first sentence of section 254(d) for broadband Internet access service is intended to encompass, however, situations where incumbent local exchange carriers or other common carriers voluntarily choose to offer Internet transmission services as telecommunications services subject to the full scope of Title II requirements for such services. As a result, such providers remain subject to the mandatory contribution obligations that arise under section 254(d) and the Commission's rules by virtue of their elective provision of such services until such time as the Commission further addresses contributions reform in the pending proceeding.

491. We also forbear from applying sections 254(g) and (k) and our associated rules. Section 254(g) requires "that the rates charged by providers of interexchange telecommunications services to subscribers in rural and high cost areas shall be no higher than the rates charged by each such provider to its subscribers in urban areas." Section 254(k) prohibits the use of revenues from a non-competitive service to subsidize a service that is subject to competition. Commenters' arguments to apply provisions of section 254 appear focused on the provisions dealt with above—*i.e.*, provisions providing for support of broadband networks or services or addressing universal service contributions-and do not appear to focus at all on why we should not

forbear from applying the requirements of sections 254(g) and (k) and our implementing rules. In particular, consistent with the more detailed discussion in our analysis below, we are not persuaded that applying these provisions is necessary for purposes of sections 10(a)(1) and (a)(2), particularly given the availability of the core broadband Internet access service requirements. Likewise, under the tailored regulatory approach we find warranted here, informed by our responsibilities under section 706, we conclude that forbearance from enforcing sections 254(g) and (k) is in the public interest under section 10(a)(3). We thus forbear from applying these provisions insofar as they would be newly triggered by the classification of broadband Internet access service in this Order. Nothing in our forbearance with respect to section 254(k) for broadband Internet access service is intended to encompass, however, situations where incumbent local exchange carriers or other common carriers voluntarily choose to offer Internet transmission services as telecommunications services subject to the full scope of Title II requirements such services. As a result, such providers remain subject to the obligations that arise under section 254(k) and the Commission's rules by virtue of their elective provision of such services. (For example, if a rate-of-return incumbent LEC (or other provider) voluntarily offers Internet transmission outside the forbearance framework adopted in this Order, it remains subject to the pre-existing Title II rights and obligations, including those from which we forbear in this Order.)

2. Broad Forbearance From 27 Title II Provisions for Broadband Internet Access Service

492. Beyond those core broadband Internet access service requirements we grant extensive forbearance as permitted by our authority under section 10 of the Act based on our predictive judgment regarding the adequacy of other protections where needed, coupled with the role of section 706 of the 1996 Act and our desire to tailor the requirements that should apply here, likewise persuade us that this forbearance is in the public interest. The analyses and forbearance decisions regarding broadband Internet access service reflect the broad support in the record for expansive forbearance. With respect to proposals to retain particular statutory provisions or requirements, we are not persuaded by the record here that forbearance is not justified for the reasons discussed below.

493. As a threshold matter, we reject arguments from certain commenters that include bare assertions that we should not forbear as to particular provisions or regulations without any meaningful supporting analysis or discussion under the section 10(a) framework. To the extent that these commenters argue for a narrower result than the forbearance we grant here, such conclusory arguments do not undercut our finding that the section 10(a) criteria are met as to the forbearance granted here with respect to broadband Internet access service. For similar reasons we reject arguments that the Commission should "exempt from forbearance . . . Section 228 . . . provid[ing] customers with protections from abusive practices by pay-per-call service providers" insofar as they do not explain how such a provision meaningfully would apply in the context of broadband Internet access service or why the section 10(a) criteria are not met in that context. As a result, these arguments do not call into question our section 10(a) findings below in the context of the broadband Internet access service. With respect to proposals to retain other statutory provisions, we conclude that commenters fail to demonstrate at this time that other, applicable requirements or protections are inadequate, for the reasons discussed below.

494. For each of the remaining statutory and regulatory obligations triggered by our classification decision, the realities of the near-term past under the prior "information service" classification inform our section 10(a) analysis. Although that practical baseline is not itself dispositive of the appropriate regulatory treatment of broadband Internet access service, the record reveals numerous concerns about the burdens—or, at a minimum, regulatory uncertainty-that would be fostered by a sudden, substantial expansion of the actual or potential regulatory requirements and obligations relative to the status quo from the nearterm past. (We are not persuaded by arguments that a tailored regulatory approach like that adopted here inherently would be inferior to the adoption of a more regulatory approach in this Order. Rather, we base our decision to adopt such a tailored approach based both on our own analysis of the overall record regarding investment incentives (which can involve multifaceted considerations), and the wisdom we see in exercising our discretion to proceed incrementally, as discussed in greater detail below.) It is within the agency's discretion to proceed incrementally, and we find that

adopting an incremental approach here—by virtue of the forbearance granted here—guards against any unanticipated and undesired detrimental effects on broadband deployment that could arise. We note in this regard that when exercising its section 10 forbearance authority "[g]uided by section 706," the Commission permissibly may "decide[] to balance the future benefits" of encouraging broadband deployment "against [the] short term impact" from a grant of forbearance. Under the section 10(a) analysis, we are particularly persuaded to give greater weight at this time to the likely benefits of proceeding incrementally given the speculative or otherwise limited nature of the arguments in the current record regarding the possible near-term harms from forbearance of the scope adopted here

495. We further conclude that our analytical approach as to all the provisions and regulations from which we forbear in this Order is consistent with section 10(a). Under section 10(a)(1), we consider here whether particular provisions and regulations are 'necessary" to ensure "just and reasonable" conduct by broadband Internet access service providers. Interpreting those ambiguous terms, we conclude that we reasonably can account for policy trade-offs that can arise under particular regulatory approaches. (While the specific balancing at issue in EarthLink v. FCC, 462 F.3d at 8–9, may have involved trade-offs regarding competition, we nonetheless believe the view expressed in that decision accords with our conclusion here that we permissibly can interpret and apply all the section 10(a) criteria to also reflect the competing policy concerns here. As the D.C. Circuit also has observed, within the statutory framework that Congress established, the Commission "possesses significant, albeit not unfettered, authority and discretion to settle on the best regulatory or deregulatory approach to broadband.") For one, we find it reasonable in the broadband Internet access service context for our interpretation and application of section 10(a)(1) to be informed by section 706 of the 1996 Act. (Given the characteristics specific to broadband Internet access service that we find on the record here—including, among other things, protections from the newlyadopted open Internet rules and the overlay of section 706-we limit our forbearance from the relevant provisions and regulations to the context of broadband Internet access service.

Outside that context, they will continue to apply as they have previously, unaffected by this Order. We thus reject claims that the actions or analysis here effectively treat forborne-from provisions or regulations as surplusage or that we are somehow ignoring significant portions of the Act.) As discussed above, section 706 of the 1996 Act "explicitly directs the FCC to 'utiliz[e]' forbearance to 'encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans,' " and our recent negative section 706(b) determination triggers a duty under section 706 for the Commission to "take immediate action to accelerate deployment." As discussed in greater detail below, a tailored regulatory approach avoids disincentives for broadband deployment, which we weigh in considering what outcomes are just and reasonable—and whether the forborne-from provisions are necessary to ensure just and reasonable conductunder our section 10(a)(1) analyses in this item. Furthermore, our forbearance in this Order, informed by recent experience and the record in this proceeding, reflects the recognition that, beyond the specific bright-line rules adopted above, particular conduct by a broadband Internet access service provider can have mixed consequences, rendering case-by-case evaluation superior to bright-line rules. Consequently, based on those considerations, it is our predictive judgment that, outside the bright line rules applied under this Order, just and reasonable conduct by broadband providers is better ensured under section 10(a)(1) by the case-by-case regulatory approach we adopt—which enables us to account for the countervailing policy implications of given conduct—rather than any of the more bright-line requirements that would have flowed from the provisions and regulations from which we forbear. (As explained above, we conclude that while competition can be a sufficient basis to grant forbearance, it is not inherently necessary in order to find section 10 satisfied. Given our assessment of the advantages of the regulatory framework applied under this Order, we also reject suggestions that, where the Commission does not rely on sufficient competition to justify forbearance, alternative ex ante regulations would always be necessary to ensure just and reasonable conduct and otherwise provide a basis for finding the section 10(a) criteria to be met. Further, while the Final Regulatory Flexibility Analysis estimates a large

possible universe of broadband Internet access service providers, we do not find a basis to conclude that they all—or a sufficiently significant number of them—are likely to be simultaneously subject to complaints to render the caseby-case approach unworkable or inferior to additional bright line rules, and thus reject concerns to the contrary.) These same considerations underlie our section 10(a)(2) analyses, as well, since advancing broadband deployment and ensuring appropriately nuanced evaluations of the consequences of broadband provider conduct better protects consumers. Likewise, these same policy considerations are central to the conclusion that the forbearance granted in this Order, against the backdrop of the protections that remain, best advance the public interest under section 10(a)(3).

a. Tariffing (Sections 203, 204)

496. We find the section 10(a) criteria met and forbear from applying section 203 of the Act insofar as it newly applies to providers by virtue of our classification of broadband Internet access service. That provision requires common carriers to file a schedule of rates and charges for interstate common carrier services. As a threshold matter, we find broad support in the record for expansive forbearance, as discussed above. Moreover, as advocated by some commenters, it is our predictive judgment that other protections that remain in place are adequate to guard against unjust and unreasonable and unjustly and unreasonably discriminatory rates and practices in accordance with section 10(a)(1) and to protect consumers under section 10(a)(2). We likewise conclude that those other protections reflect the appropriate calibration of regulation of broadband Internet access service at this time, such that forbearance is in the public interest under section 10(a)(3).

497. As discussed below, sections 201 and 202 of the Act and our open Internet rules are designed to preserve and protect Internet openness, prohibiting unjust and unreasonable and unjustly or unreasonably discriminatory conduct by providers of broadband Internet access service for or in connection with broadband Internet access service and protecting the retail mass market customers of broadband Internet access service. In particular, under our open Internet rules and the application of sections 201 and 202, we establish both *ex ante* legal requirements and a framework for caseby-case evaluations governing broadband providers' actions. In calibrating the legal framework in that

manner, we consider, among other things, the operation of the marketplace in conjunction with open Internet protections. It is our predictive judgment that these protections will be adequate to protect the interests of consumers—including the interest in just, reasonable, and nondiscriminatory conduct—that might otherwise be threatened by the actions of broadband providers. Importantly, broadband providers also are subject to complaints and Commission enforcement in the event that they violate sections 201 or 202 of the Act, the open Internet rules, or other elements of the core broadband Internet access requirements. We thus find on the record here that section 203's requirements are not necessary to ensure just and reasonable and not unjustly or unreasonably discriminatory rates and practices under section 10(a)(1) nor for the protection of consumers under 10(a)(2).

498. The predictive judgment underlying our section 10 analysis is informed by recent experience. Historically, tariffing requirements were not applied to broadband Internet access service under our prior "information service" classification. This provides us a practical reference point as part of our overall evaluation of the types of concerns that are likely to arise in this context, underlying our predictive judgment regarding the sufficiency of the rules and requirements that remain. Consequently, providers will not be subject to ex ante rate regulation nor any requirement of advanced Commission approval of rates and practices as otherwise would have been imposed under section 203.

499. We also find that the forbearance for broadband Internet access service satisfies sections 10(a)(1) and (a)(2) and is consistent with the public interest under section 10(a)(3) in light of the objectives of section 706. In addition to our specific conclusions above, we find more broadly that forbearing from section 203 is consistent with the overall approach that we conclude strikes the right regulatory balance for broadband Internet access service at this time. In particular, given the overlay of section 706 of the 1996 Act, we conclude that the better approach at this time is to focus on applying the core broadband Internet access service requirements rather than seeking to apply the additional provisions and regulations triggered by the classification of broadband Internet access service from which we forbear. As explained above, section 706 of the 1996 Act "explicitly directs the FCC to 'utiliz[e]' forbearance to 'encourage the deployment on a reasonable and timely

basis of advanced telecommunications capability to all Americans.'" The D.C. Circuit has further held that the Commission "possesses significant, albeit not unfettered, authority and discretion to settle on the best regulatory or deregulatory approach to broadband." We find that the scope of forbearance adopted in this order strikes the right balance at this time between, on the one hand, providing the regulatory protections clearly required by the evidence and our analysis to, among other things, guard the virtuous cycle of Internet innovation and investment and, on the other hand, avoiding additional regulations that do not appear required at this time and that risk needlessly detracting from providers' broadband investments.

500. Additionally, section 10(b) requires the Commission, as part of its public interest analysis, to analyze the impact forbearance would have on competitive market conditions. Although there is some evidence of competition for broadband Internet access service, it appears to be limited in key respects, and the record also does not provide a strong basis for concluding that the forbearance granted in this Order is likely to directly impact the competitiveness of the marketplace for broadband Internet access services. We note that the forbearance we grant is part of an overall regulatory approach designed to promote infrastructure investment in significant part by preserving and promoting innovation and competition at the edge of the network. Thus, even if the grant of forbearance does not directly promote competitive market conditions, it does so indirectly by enabling us to strike the right balance at this time in our overall regulatory approach. Our regulatory approach, viewed broadly, thus does advance competition in important ways. Ultimately, however, while we consider the section 10(b) criteria in our section 10(a)(3) public interest analysis, our public interest determination rests on other grounds. In particular, under the entirety of our section 10(a)(3) analysis, as discussed above, we conclude that the public interest supports the forbearance adopted in this Order. (These same section 10(b) findings likewise apply in the case of our other section 10(a)(3) public interest evaluations with respect to broadband Internet access service, and should be understood as incorporated there.)

501. We thus are not persuaded by other commenters arguing that the Commission's ability to forbear from section 203 depends on findings of sufficient competition. As explained above, persuasive evidence of competition is not the sole possible grounds for granting forbearance. As also explained above, we conclude at this time that the Open Internet rules and other elements of the core broadband Internet access service requirements meet our identified needs in this specific context. The Commission also has recognized previously that tariffing imposes administrative costs. We also consider our objective of striking the right balance of a regulatory and deregulatory approach, consistent with section 706 of the 1996 Act. (Indeed, even when forbearing from section 203 in the CMRS context, the Commission not only relied in part on the presence of competition, but also that continued application of sections 201, 202, and 208 "provide[s] an important protection in the event there is a market failure," and "tariffing imposes administrative costs and can themselves be a barrier to competition in some circumstances." Those are in accord with key elements of our conclusions here.) Collectively, these persuade us not to depart from the section 10(a) analysis above, irrespective of the state of competition.

502. Nor are we persuaded by commenters' specific arguments that tariffs filed under section 203 provide "the necessary information to distinguish between providers" and thus should not be subject to forbearance for broadband Internet access service. As certain of these commenters themselves note, such objectives might be met in other ways. To the extent that disclosures regarding relevant broadband provider practices are needed, our Open Internet transparency rule is designed to serve those ends. Commenters do not meaningfully explain why the transparency rule is inadequate, and thus their arguments do not persuade us to depart from our section 10(a) findings above in the case of section 203.

503. We likewise reject the proposals of other commenters that we structure our forbearance from section 203 to permissively, rather than mandatorily, detariff broadband Internet access service. As a threshold matter, we note that, as discussed above, our forbearance with respect to broadband Internet access services does not encompass incumbent local exchange carriers or other common carriers that offer Internet transmission services as telecommunications services subject to the full range of Title II requirements under the pre-existing legal framework, which does provide for permissive detariffing. Under the framework adopted in this Order, however, we are not persuaded that our open Internet

rules provide for readily administrable evaluation of the justness and reasonableness of tariff filings. Nor does the record reveal that we can rely on competitive constraints to help ensure the justness and reasonableness of tariff filings. Furthermore, as the Commission previously has recognized, permitting voluntary tariff filings can raise a number of public interest concerns, and consistent with those findings, we mandatorily detariff broadband Internet access service for purposes of the regulatory framework adopted in this Order.

504. Some commenters also advocate that the Commission retain section 204. Section 204 provides for Commission investigation of a carrier's rates and practices newly filed with the Commission, and to order refunds, if warranted. For the reasons described above, however, we forbear from sections 203's tariffing requirements for broadband Internet access service, and adopt mandatory detariffing. Given that decision, commenters do not indicate what purpose section 204 still would serve, and we thus do not depart in this context from our overarching section 10(a) forbearance analysis above.

b. Enforcement-Related Provisions (Sections 205, 212)

505. We find forbearance from applying certain enforcement-related provisions of Title II beyond the core Title II enforcement authority discussed above warranted under section 10(a), and we reject arguments to the contrary. Section 205 provides for Commission investigation of existing rates and practices and to prescribe rates and practices if it determines that the carrier's rates or practices do not comply with the Communications Act. The Commission previously has forborne from enforcing section 205 where it sought to adopt a tailored, limited regulatory environment and where, notwithstanding that forbearance, given the continued application of sections 201 and 202 and other complaint processes. For similar reasons here, we find at this time that the core Title II enforcement authority, along with the ability to pursue claims in court, as discussed below, provide adequate enforcement options and the statutory forbearance test is met for section 205. Consistent with our analysis above, it thus is our predictive judgment that these provisions are not necessary to ensure just, reasonable and nondiscriminatory conduct by providers of broadband Internet access service or to protect consumers under sections 10(a)(1) and (a)(2). In addition, as above, under the tailored regulatory approach

we find warranted here, informed by our responsibilities under section 706, we conclude that forbearance is in the public interest under section 10(a)(3). We thus reject claims that forbearance from section 205, insofar as it is triggered by our classification of broadband Internet access service, is not warranted. (Although Public Knowledge et al. cite marketplace differences between CMRS and broadband Internet access service, they do not explain why those differences necessitate a narrower forbearance decision in this contextparticularly since we do not rely on the state of competition as a rationale for our forbearance decision—whether as to section 205, or as to the other provisions discussed there (sections 204, 211, 212).)

506. We also forbear from applying section 212 to the extent that it newly applies by virtue of our classification of broadband Internet access service. Section 212 empowers the Commission to monitor interlocking directorates, *i.e.*, the involvement of directors or officers holding such positions in more than one common carrier. In the CMRS context, the Commission granted forbearance from section 212 on the grounds that forbearance would reduce regulatory burdens without adversely affecting rates in the CMRS market. The Commission noted that section 212 was originally placed in the Communications Act to prevent interlocking officers from engaging in anticompetitive practices, such as price fixing. The Commission found, however, that protections of section 201(b), 221, (The Commission noted that section 221 provided protections against interlocking directorates, but section 221(a) was repealed in the Telecommunications Act of 1996. This section gave the Commission the power to review proposed consolidations and mergers of telephone companies. While section 221(a) allowed the Commission to bolster its analysis to forbear from section 212 in the Wireless Forbearance Order, the protections against interlocking directorates provided by section 201(b) and 15 U.S.C. 19 provide sufficient protection to forbear from section 212 for broadband Internet access services.) and antitrust laws were sufficient to protect consumers against the potential harms from interlocking directorates. Forbearance also reduced an unnecessary regulatory cost imposed on carriers. The Commission later extended this forbearance to dominant carriers and carriers not yet found to be non-dominant, repealing part 62 of its rules and granting forbearance from the provisions of section 212. Commenters

have not explained why we should not find the protections of section 201(b) and antitrust law adequate here, as well. It likewise is our predictive judgment that other protections will adequately ensure just, reasonable, and nondiscriminatory conduct by providers of broadband Internet access service and protect consumers here, and thus conclude that the application of section 212 is not necessary for purposes of sections 10(a)(1) or (a)(2). Moreover, as above, under the tailored regulatory approach we find warranted here, informed by our responsibilities under section 706, we conclude that forbearance is in the public interest under section 10(a)(3).

c. Information Collection and Reporting Provisions (Sections 211, 213, 215, 218 Through 220)

507. In addition, although some commenters advocate that the Commission retain provisions of the Act that provide "discretionary powers to compel production of useful information or the filing of regular reports," we find the section 10(a) factors met and grant forbearance. However, the cited provisions principally are used by the Commission to implement its traditional rate-making authority over common carriers. Here, we do not apply tariffing requirements or ex ante rate regulation of broadband Internet access service of the sort for which these requirements would be needed. Indeed, we cannot and do not envision adopting such requirements in the future. Thus, we do not find it necessary or in the public interest to apply these provisions simply in anticipation of such an exceedingly unlikely scenario. Moreover, as particularly relevant here, section 706 of the 1996 Act, along with other statutory provisions, give the Commission authority to collect necessary information. We recognize that the Commission generally did not forbear from these requirements in the CMRS context, noting the minimal regulatory burdens they imposed on such providers, and observing that reservation of this Commission authority would allow further consideration of possible information collection requirements, given that "the cellular market is not yet fully competitive." As explained above, in this context, however, we find forbearance to be the more prudent course, and therefore in the public interest under section 10(a)(3), given both our intention of tailoring the regulations applicable to broadband Internet access service given our responsibility under section 706 to

encourage deployment. Because we also do not find the information collection and reporting provisions raised by commenters to be necessary at this time within the meaning of sections 10(a)(1) and (a)(2), we forbear from applying these provisions insofar as they otherwise newly would apply by virtue of our classification of broadband Internet access service.

d. Discontinuance, Transfer of Control, and Network Reliability Approval (Section 214)

(Unless otherwise indicated, for convenience, this item uses "discontinuance," to also include reduction or impairment of service under section 214.)

508. We also find section 10(a) met for purposes of forbearing from applying section 214 discontinuance approval requirements. We reject the arguments of some commenters that we should not forbear, which focus in particular on concerns about discontinuances in rural areas or areas with only one provider. As a threshold matter, our universal service rules are designed to advance the deployment of broadband networks. including in rural and high-cost areas. Notably, this includes certain public interest obligations on the part of highcost universal service support recipients to offer broadband Internet access service. Consequently, these provide important protections, especially in rural areas or areas that might only have one provider. Further, the conduct standards in our open Internet rules provide important protections against reduction or impairment of broadband Internet access service short of the complete cessation of providing that service. Thus, while we agree with commenters regarding the importance of broadband Internet access service, including in rural areas or areas served by only one provider, the generalized arguments of those commenters do not explain why the protections described above, in conjunction with the core broadband Internet access service requirements more broadly, are not likely to be sufficient to guard against unjust or unreasonable conduct by providers of broadband Internet access service or to protect consumers.

509. Moreover, the Commission has recognized in the past that section 214 discontinuance requirements impose some costs, although the significance of those costs is greater where (unlike here) the marketplace for the relevant service is competitive. Further, as discussed above, we find the most prudent regulatory approach at this time is to proceed incrementally when adding regulations beyond what had been the prior status quo. (The overlay of section 706 of the 1996 Act here, including how it informs our decision to proceed incrementally, distinguishes this from the Commission's prior evaluation of relief from Title II for CMRS. Consequently, although we look to the precedent from the CMRS context—as we do other forbearance precedent-to the extent that it is instructive, the mere fact that we declined to forbear from applying a provision in the CMRS context does not demonstrate that we should continue to apply it here as some suggest.) Given those considerations, and against the backdrop of other protections here, as discussed above, commenters have not persuaded us that applying section 214 discontinuance requirements with respect to broadband Internet access service is necessary within the meaning of sections 10(a)(1) and (a)(2) or that forbearance would not be in the public interest under section 10(a)(3). We thus forbear from applying section 214 discontinuance requirements to the extent that they would be triggered by our classification of broadband Internet access service here.

510. We also reject arguments against forbearance from applying section 214 to enable the Commission to engage in merger review. As these commenters recognize, prior to this Order the Commission already has commonly reviewed acquisitions of or mergers among entities that provide broadband services. (For example, the Commission reviews all applications for transfer or assignment of a wireless license, including licenses used to provide broadband services, pursuant to section 310(d) of the Act to determine whether the applicants have demonstrated that the proposed transfer or assignment will serve the public interest, convenience, and necessity. As this review is not triggered by reclassification, nothing in this Order limits or otherwise affects our review under section 310.) Although these comments speculate about a future time when communications services have evolved in such a way that the Commission would lack some other basis for its review, the record here does not demonstrate that it is sufficiently imminent to warrant deviating from our section 10 analysis regarding section 214 above. Notably, today we apply the core broadband Internet access service requirements that provide important constraints on broadband providers' conduct and protections for consumers. Thus, similar to our analysis above, it is our predictive judgment that other protections will be sufficient to ensure just, reasonable, and nondiscriminatory

conduct by providers of broadband Internet access service and to protect consumers for purposes of sections 10(a)(1) and (a)(2). Given our objective to proceed in a tailored manner, we likewise find it in the public interest to forbear from applying section 214 with respect to broadband Internet access service insofar as that provision would require Commission approval of transfers of control involving that service.

511. We also grant forbearance with respect to section 214(d), under which the Commission may require a common carrier "to provide itself with adequate facilities for the expeditious and efficient performance of its service." The duty to maintain "adequate facilities" includes "undertak[ing] improvements in facilities and expansion of services to meet public demand." In practice, we expect that the exercise of this duty here would overlap significantly with the sorts of behaviors we would expect providers to have marketplace incentives to engage in voluntarily as part of the "virtuous cycle." (Thus, even if our open Internet rules do not directly address this issue, by helping promote the virtuous cycle more generally, they also will help ensure that broadband providers have marketplace incentives to behave in this manner.) Beyond that, comments contending that the Commission should not forbear as to that provision do not explain why the core broadband Internet access service requirements do not provide adequate protection at this time. Thus, as under our analysis above, it is our predictive judgment that other protections will be sufficient to ensure just, reasonable, and nondiscriminatory conduct by providers of broadband Internet access service and to protect consumers for purposes of sections 10(a)(1) and (a)(2). Likewise, informed by section 706 we have an objective of tailoring the regulatory approach here, and thus find forbearance warranted under section 10(a)(3) insofar as section 214(d) would apply by virtue of our classification of broadband Internet access service.

e. Interconnection and Market-Opening Provisions (Sections 251, 252, 256)

512. At this time, we conclude that the availability of other protections adequately address commenters' concerns about forbearance from the interconnection (Although commenters appear to use the term "interconnection" to mean a potentially wide range of different things, for purposes of this section we use that term solely in the manner it is used and defined for purpose of these provisions.)

provisions under the section 251/252 framework (As discussed above. however, we do not forbear from applying section 251(a)(2) with respect to broadband Internet access service, and that provision thus is outside the scope of the discussion here.) and under section 256. (As a result of the forbearance granted from section 251 below, section 252 thus is inapplicable, insofar it is simply a tool for implementing the section 251 obligations. Although we do not forbear from applying section 251(a)(2) with respect to broadband Internet access service, we note that the Commission previously has held that the procedures of section 252 are not applicable in matters simply involving section 251(a). To the extent that the Commission nonetheless could be seen as newly applying section 252 with respect to broadband Internet access service as a result of our classification decision here, we find the section 10 criteria met to grant forbearance from that provision for the same reasons discussed with respect to section 251 in the text above.) We thus forbear from applying those provisions to the extent that they are triggered by the classification of broadband Internet access service in this Order. The Commission retains authority under sections 201, 202 and the open Internet rules to address interconnection issues should they arise, including through evaluating whether broadband providers' conduct is just and reasonable on a case-by-case basis. We therefore conclude that these remaining legal protections that apply with respect to providers of broadband Internet access service will enable us to act if needed to ensure that a broadband provider does not unreasonably refuse to provide service or interconnect. (Our finding of significant overlap between the authority retained by the Commission under section 201 and the interconnection requirements of section 251 is reinforced by Congress' inclusion of section 251(g) and (i), which, notwithstanding the requirements of section 251, preserve the Commission's pre-1996 Act interconnection requirements as well as its ongoing authority under section 201.) Further, we find that applying the legal structure adopted in this Order better enables us to achieve a tailored framework than requiring compliance with interconnection under section 251, in that the application of that framework leaves more to the Commission's discretion, rather than being subject to mandatory regulation under section 251. Because we retain our authority to apply and enforce these other protections, we

reject commenters' suggestion that the section 10(a) forbearance criteria are not met as to sections 251 and 256. (This is particularly true as to section 256, which does not provide the Commission any additional authority that it does not otherwise have.) Rather, consistent with our analysis for other provisions, we find that other protections render application of these provisions unnecessary for purposes of sections 10(a)(1) and (a)(2) and the forbearance reflects our tailored regulatory approach, informed by section 706, and thus is in the public interest under section 10(a)(3).

513. We also reject arguments suggesting that we should not forbear from applying sections 251(b) and (c) with respect to broadband Internet access service. For example, sections 251(b)(1), (4), and (5) impose obligations on LECs regarding resale, access to rights-of-way, and reciprocal compensation. Section 251(c) subjects incumbent LECs to unbundling, resale, collocation, and other competition policy obligations. (We reject claims that section 251(c) has not been fully implemented "[b]ecause the Commission has never applied section 251(c) to the provision of broadband Internet access service" as at odds with that precedent. The Commission has adopted rules implementing section 251(c), and the fact that the manner in which those rules apply might vary with the classification of a particular service (or changes in that classification) does not alter that fact. Therefore, the prohibition in section 10(d) of the Act against forbearing from section 251(c) prior to such a determination is not applicable.) While we recognize the important competition policy goals that spurred Congress' adoption of these requirements in the 1996 Act, we are persuaded to forbear from applying these provisions under the circumstances here. In particular, we find the interests of customers of customers of broadband Internet access service, under section 10(a)(1) and (a)(2), and the public interest more generally, under section 10(a)(3) is best served by an overall regulatory framework that includes forbearance from these provisions, which balances the need for appropriate Commission oversight with the goal of tailoring its regulatory requirements. The Commission previously has sought to balance the advancement of competition policy with the duty to encourage advanced services deployment pursuant to section 706. Moreover, to the extent that entities otherwise are LECs or incumbent LECs, the forbearance

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granted in this decision does not eliminate any previously-applicable requirements of sections 251(b) and (c) and our implementing rules. In addition, the Commission retains authority to address unjust or unreasonable conduct through its section 201 and 202 authority. Thus, we do not find the competition policy requirements of sections 251 and 259 and the implementing rules necessary within the meaning of section 10(a)(1) or (2), and conclude that forbearance would be in the public interest under section 10(a)(3). As a result, we forbear from those requirements in the context of broadband Internet access service to the extent that those provisions newly apply by virtue of our classification of that service here.

f. Subscriber Changes (Section 258)

514. We also are persuaded, under the section 10(a) framework, to forbear from applying section 258's prohibition on unauthorized carrier changes, and we reject suggestions to the contrary by some commenters. In the voice service context, that provision, and the Commission's implementing rules, provide important protections given the ability of a new provider to effectuate a carrier change not only without the consent of the customer but also without direct involvement of the customer's existing carrier. While unauthorized carrier change problems theoretically might arise even outside such a context, the record here does not reveal whether or how, in practice, unauthorized changes in broadband Internet access service providers could occur. As a result, on this record we are not persuaded what objective would be served by application of this provision at all, particularly given the protections provided by the core broadband Internet access service requirements. As under our analysis of other provisions, we conclude that application of section 258 is not necessary for purposes of sections 10(a)(1) and (a)(2) and that forbearance is in the public interest. Therefore, insofar as our classification of broadband Internet access service would newly give rise to the application of section 258, we forbear from applying section 258 to that service.

g. Other Title II Provisions

515. Beyond the provisions already addressed above, we also forbear from applying those additional Title II provisions that could give rise to new requirements by virtue of our classification of broadband Internet access service to the extent of our section 10 authority. We find it notable that no commenters raised significant concerns about forbearing from these requirements, which reinforces our analysis below.

516. For one, we conclude the threeparty statutory test under section 10(a) is met to forbear from applying certain provisions concerning BOCs in sections 271 through 276 of the Act to the extent that they would impose new requirements arising from the classification of broadband Internet access service in this Order. Sections 271, 272, 274, and 275 establish requirements and safeguards regarding the provision of interLATA services, electronic publishing, and alarm monitoring services by the Bell Operating Companies (BOCs) and their affiliates. Section 273 addresses the manufacturing, provision, and procurement of telecommunications equipment and customer premises equipment (CPE) by the BOCs and their affiliates, the establishment and implementation of technical standards for telecommunications equipment and CPE, and joint network planning and design, among other matters. Section 276 addresses the provision of "payphone service," and in particular establishes nondiscrimination standards applicable to BOC provision of payphone service.

517. With one exception (discussed below), we conclude that the application of any newly-triggered provisions of sections 271 through 276 to broadband Internet access service is not necessary within the meaning of section 10(a)(1) or (2), and that forbearance from these requirements is consistent with the public interest under section 10(a)(3). Many of the provisions in these sections have no current effect. Other provisions in these sections impose continuing obligations that are at most tangentially related to the provision of broadband Internet access service. Forbearance from any application of these provisions with respect to broadband Internet access service insofar as they are newly triggered by our classification of that service will not meaningfully affect the charges, practices, classifications, or regulations for or in connection with that service, consumer protection, or the public interest. (Consistent with our general approach to forbearance here, which seeks to address new requirements that could be triggered by our classification of broadband Internet access service, we do not forbear with respect to provisions to the extent that they already applied prior to this Order. For example, section 271(c) establishes substantive standards that a BOC was required to meet in order to obtain authorization to provide interLATA

services in an in-region state, and which it and must continue to meet in order to retain that authorization. In addition, section 271(c)(2)(B)(iii), requires that a BOC provide nondiscriminatory access to poles, ducts, conduits, and rights-ofway in accordance with the requirements of section 224 of the Act, does not depend upon the classification of BOCs' broadband Internet access service. In combination with section 271(d)(6), this provision provides the Commission with an additional mechanism to enforce section 224 against the BOCs. We also do not forbear from section 271(d)(6) to the extent that it provides for enforcement of the provisions we do not forbear from here. In addition, while the BOC-specific provisions of section 276 theoretically could be newly implicated insofar as the reclassification of broadband Internet access service might result in some entities newly being treated as a BOC, the bulk of section 276 appears independent of the classification of broadband Internet access service and we thus do not forbear as to those provisions.)

518. Forbearance for certain other provisions not meaningfully addressed by commenters also flows from our analysis of certain provisions that commenters did raise or that are discussed in greater detail elsewhere. First, as described elsewhere, we forbear from all *ex ante* rate regulations. tariffing and related recordkeeping and reporting requirements insofar as they would arise from our classification of broadband Internet access service. Second, we likewise forbear from unbundling and network access requirements that would newly apply based on the classification decision in this Order. It is our predictive judgment that other protections—notably the core broadband Internet access service requirements—will be adequate to ensure just, reasonable, and nondiscriminatory conduct by providers of broadband Internet access service and to protect consumers for purposes of sections 10(a)(1) and (a)(2). Further, informed by our responsibilities under section 706, we adopt an incremental regulatory approach that we find strikes the appropriate public interest balance under section 10(a)(3). For these same reasons, we forbear from section 221's property records classification and valuation provisions, which would be used in the sort of ex ante rate regulation that we do not find warranted for broadband Internet access service. Likewise, just as we forbear from broader unbundling obligations, that same analysis persuades us to forbear

from applying section 259's infrastructure sharing and notification requirements.

519. We also grant forbearance from other miscellaneous provisions to the extent that they would newly apply as a result of our classification insofar as they do not appear necessary or even relevant for broadband Internet access service of broadband Internet access service. For one, section 226, the **Telephone Operator Consumer Services** Improvement Act ("TOCSIA"), protects consumers making interstate operator services calls from pay telephones, and other public telephones, against unreasonably high rates and anticompetitive practices. Section 227(c)(3) provides for carriers to have certain notification obligations as it relates to the requirements of the Telephone Consumer Protection Act (TCPA), and section 227(e) restricts the provision of inaccurate caller identification information associated with any telecommunications service. Section 228 regulates the offering of pay-per-call services and requires carriers, inter alia, to maintain lists of information providers to whom they assign a telephone number, to provide a short description of the services the information providers offer, and a statement of the cost per minute or the total cost for each service. Section 260 regulates local exchange carrier practices with respect to the provision of telemessaging services. It is not clear how these provisions would be relevant to broadband Internet access service, and commenters to not provide meaningful arguments in that regard. Thus, for that reason, as well as the continued availability of the core broadband Internet access service requirements, we find enforcement of these provisions, to the extent they would newly apply by virtue of our classification of broadband Internet access service, is not necessary to ensure that the charges, practices, classifications, or regulations by, for, or in connection with broadband providers are just and reasonable and are not unjustly or unreasonably discriminatory under section 10(a)(1). Enforcement also is not necessary for the protection of consumers under section 10(a)(2), and forbearance from applying these provisions is consistent with the public interest under section 10(a)(3), particularly given our conclusion, informed by section 706, that it is appropriate to proceed incrementally here.

520. We also note that the provisions of section 276 underlying the Commission's regulation of inmate calling services (ICS) and the ICS rules

themselves do not appear to vary depending on whether broadband Internet access service is an "information service" or "telecommunications service." We note, however, that The DC Prisoners' Legal Services Project, Inc., *et al.* (the ICS Petitioners) express concern that forbearance under this order could be misconstrued as a limitation on the Commission's authority with respect to any advanced ICS services (such as video visitation) that may replace or supplement traditional ICS telephone calls. It is not our intent to limit in any way the Commission's ability to address ICS, particularly given the Commission's finding in 2013 that the ICS market "is failing to protect the inmates and families who pay [ICS] charges." We therefore find that forbearance would fail to meet the statutory test of section 10 of the Act, in that the protections of section 276 remain necessary to protect consumers and serve the public interest. Accordingly, out of an abundance of caution we make clear that we are not forbearing from applying section 276 to the extent applicable to ICS, as well as the ICS rules.

h. Truth-in-Billing Rules

521. We also find the section 10(a) criteria met and forbear from applying our truth-in-billing rules insofar as they are triggered by our classification of broadband Internet access service here. The core broadband Internet access requirements, including the requirement of just and reasonable conduct under section 201(b), will provide important protections in this context even without specific rules. Moreover, even advocates of such protections observe that this "may require further examination by the Commission," and do not actually propose that the current truth-in-billing rules immediately apply in practice, instead recommending that the Commission "temporarily stay these rules [and] implement interim provisions." They do not explain what such interim provisions should be, however, and as we explain below we are not persuaded that a stay or timelimited forbearance provides advantages relative to the approach we adopt here. Consequently, as in our analysis above, we are not persuaded that our truth-inbilling rules are necessary for purposes of sections 10(a)(1) and (a)(2), particularly given the availability of the core broadband Internet access service requirements. Likewise, as above, under the tailored regulatory approach we find warranted here, informed by our responsibilities under section 706, we

conclude that forbearance is in the public interest under section 10(a)(3).

i. Roaming-Related Provisions and Regulations

522. We find section 10(a) met for purposes of granting certain conditional forbearance from roaming regulations. We recognize that the reclassification decisions elsewhere in this Order potentially alter the scope of an MBIAS provider's roaming obligations. The Commission has previously established two different regimes to govern the roaming obligations of commercial mobile providers. The first regime, established in 2007 pursuant to authority under sections 201 and 202 of the Act, imposes obligations to provide automatic roaming on CMRS carriers that "offer real-time, two-way switched voice or data service that is interconnected with the public switched network and utilizes an in-network switching facility." Such carriers were required, on reasonable request, to provide automatic roaming on reasonable and not unreasonably discriminatory terms and conditions.

523. Because this regime did not extend to data services that were not at that time classified as CMRS, the Commission adopted another roaming regime in 2011 under its Title III authority, applicable to "commercial mobile data services," which were defined to include all those commercial mobile services that are not interconnected with the public switched network, including (under the definition of "public switched network" applicable at that time) MBIAS. Under this data roaming provision, covered service providers were required to offer roaming arrangements to other such providers on commercially reasonable terms and conditions, subject to certain specified limits.

⁵524. Our determination herein to reclassify MBIAS as CMRS potentially affects the roaming obligations of MBIAS providers in two ways. First, absent any action by the Commission to preserve data roaming obligations, the determination that MBIAS is an interconnected service would result in providers of MBIAS no longer being subject to the data roaming rule, which as noted above, applies only to noninterconnected services. Second, the determination that MBIAS is CMRS potentially subjects MBIAS providers to the terms of the CMRS roaming rules.

525. We decide to retain for MBIAS, at this time, the roaming obligations that applied prior to reclassification of that service, consistent with our intent to proceed incrementally with regard to regulatory changes for MBIAS, and in the absence of significant comment in the instant record regarding the specific roaming requirements that should apply to MBIAS after reclassification. We therefore forbear from the application of the CMRS roaming rule, section 20.12(d), to MBIAS providers, conditioned on such providers continuing to be subject to the obligations, process, and remedies under the data roaming rule codified in section 20.12(e). That condition, coupled with the core broadband Internet access service requirements that remain, persuade us that the forbornefrom rules are not necessary at this time for purposes of sections 10(a)(1) and (a)(2) and that such conditional forbearance is in the public interest under section 10(a)(3). We commit, however, to commence in the near term a separate proceeding to revisit the data roaming obligations of MBIAS providers in light of our reclassification decisions today. Such a proceeding will permit us to make an informed decision, based on a complete and focused record, on the proper scope of MBIAS providers' roaming obligations after reclassification. Pending the outcome of that reexamination, MBIAS providers covered by our conditional forbearance continue to be subject to the obligations under the data roaming rule, and we will take any action necessary to enforce those obligations. To ensure, however, that providers have certainty regarding their roaming obligations pending the outcome of the roaming proceeding, we further provide that determinations adopted in that proceeding will apply only prospectively, *i.e.* only to conduct occurring after the effective date of any rule changes. The data roaming rule, rather than the automatic roaming rule or Title II, will govern conduct prior to any such changes.

j. Terminal Equipment Rules

526. We also determine under section 10(a) to forbear from applying certain terminal equipment rules to the extent that they would newly apply by virtue of the classification of broadband Internet access service. (While Full Service Network/TruConnect refer generally to our "Part 68" rules, that Part also includes our hearing aid compatibility rules, and as described above, the Commission's existing hearing aid compatibility rules do not immediately impose new hearing aid compatibility requirements on mobile wireless broadband providers by virtue of the classification decisions in this Order, and we do not forbear from applying those rules or section 710 of the Act. Section 710 of the Act and our hearing aid compatibility rules thus are

not encompassed by the discussion here.) Notably, our open Internet rules themselves prevent broadband Internet access service providers from restricting the use of non-harmful devices, subject to reasonable network management. (Insofar as any Part 68 rules subject to forbearance here also permitted carriers to take steps to protect their networks, we expect that such steps also would constitute reasonable network management under our open Internet rules.) Consequently, as in our analysis above, we are not persuaded that the application of terminal equipment rules, insofar as they would newly apply to broadband Internet access service providers by virtue of our classification decision here, are necessary for purposes of sections 10(a)(1) and (a)(2), particularly given the availability of the core broadband Internet access service requirements, and in particular our bright-line rules. Likewise, as above, under the tailored regulatory approach we find warranted here, informed by our responsibilities under section 706, we conclude that forbearance is in the public interest under section 10(a)(3).

3. Other Provisions and Regulations

527. Having discussed in detail here and above the analyses that persuade us to grant broad forbearance from Title II provisions to the extent of our section 10 authority, we conclude that the same analysis justifies forbearance from other provisions and regulations insofar as they would be triggered by the classification of broadband Internet access service in this Order. In particular, beyond the Title II provisions and certain implementing rules discussed above, the classification of broadband Internet access service could give rise to obligations related to broadband providers' provision of that service under Title III, Title VI and Commission rules.

• First, certain provisions of Titles III and VI and Commission rules (For clarity, we note that by "rules" we mean both codified and uncodified rules. In addition, by "associated" Commission rules, we mean rules implementing requirements or substantive Commission jurisdiction under provisions in Title II, III, and/or VI of the Act from which we forbear.) associated with those Titles or the provisions of Title II from which we forbear may apply by their terms to providers classified in particular ways. (The Order's classification of broadband Internet access service could trigger requirements that apply by their terms to "common carriers,"

"telecommunications carriers," "providers" of common carrier or

telecommunications services, or 'providers' of CMRS or commercial mobile services. Similarly, other provisions of the Act and Commission rules may impose requirements on entities predicated on the entities' classification as a "common carrier," "telecommunications carrier," "provider" of common carrier or telecommunications service, or "provider" of CMRS or commercial mobile service without being framed in those terms.) As to this first category of requirements, and except as to the core broadband Internet access service requirements, we forbear from any such provisions and regulations to the full extent of our authority under section 10, but only insofar as a broadband provider falls within those categories or provider classifications by virtue of its provision of broadband Internet access service, but not insofar as those entities fall within those categories of classifications by virtue of other services they provide.

• Second, certain provisions of Titles III and VI and Commission rules associated with those Titles or the provisions of Title II from which we forbear may apply by their terms to services classified in particular ways. (The classification of broadband Internet access service as a telecommunications service and, in the mobile context, also CMRS service under the Communications Act, thus could trigger any requirements that apply by their terms to "common carrier services," "telecommunications services," or "CMRS" or "commercial mobile" services. Similarly, other provisions of the Act and Commission rules may impose requirements on services predicated on a service's classification as a "common carrier service," "telecommunications service," "CMRS" or "commercial mobile" service without being framed in those terms.) Regarding this second category of requirements (to the extent not already covered by the first category, above), and except as to the core broadband Internet access service requirements, we forbear from any such provisions and regulations to the full extent of our authority under section 10 specifically with respect to broadband Internet access service, but do not forbear from these requirements as to any other services (if any) that broadband providers offer that are subject to these requirements.

• Third, while commenters do not appear to have identified such rules, there potentially could be other Commission rules for which our underlying authority derives from provisions of the Act all of which we forbear from under the first two categories of requirements identified above, or under our Title II forbearance discussed above, but which are not already subject to that identified scope of forbearance. To the extent not already identified in the first two categories of requirements above, and except as to the core broadband Internet access service requirements, we forbear to the full extent of our authority under section 10 from rules based entirely on our authority under provisions we forbear from under the first and second categories above (or for which the forborne-from provisions provide essential authority) insofar as the rules newly apply as a result of the classification of broadband Internet access service.

• Fourth, we include within the scope of our broad forbearance for broadband Internet access service any pre-existing rules with the primary focus of implementing the requirements and substantive Commission jurisdiction in sections 201 and/or 202, including forbearing from pre-existing pricing, accounting, billing and recordkeeping rules. (This forbearance would not include rules implementing our substantive jurisdiction under provisions of the Act from which we do not forbear that merely cite or rely on sections 201 or 202 in some incidental way, such as by, for example, relying on the rulemaking authority provided in section 201(b). Consistent with our discussions above, this category also does not include our open Internet rules.) As with the rules identified under the first and second categories above, we do not forbear insofar as a provider is subject to these rules by virtue of some other service it provides.

• Fifth, the classification of broadband Internet access service as a telecommunications service could trigger certain contributions to support mechanisms or fee payment requirements under the Act and Commission rules, including some beyond those encompassed by the categories above. Insofar as any provisions or regulations not already covered above would immediately require the payment of contributions or fees by virtue of the classification of broadband Internet access service (rather than merely providing Commission authority to assess such contributions or fees) they are included within the scope of our forbearance. As under the first and second categories above, we do not forbear insofar as a provider is subject to these contribution or fee payments by virtue of some other service it provides.

Just as we found in our analysis of Title II provisions, it is our predictive judgment that other protections—

notably the core broadband Internet access service requirements-will be adequate to ensure just, reasonable, and nondiscriminatory conduct by providers of broadband Internet access service and to protect consumers for purposes of sections 10(a)(1) and (a)(2). Further, informed by our responsibilities under section 706, we adopt an incremental regulatory approach that we find strikes the appropriate public interest balance under section 10(a)(3). These collectively persuade us that forbearance for the additional categories of provisions and regulations above is justified to the extent of our section 10 authority.

528. We further make clear that our approach to forbearance in this Order, which excludes certain categories of provisions and regulations, effectively addresses the concerns of a number of commenters regarding the scope of our forbearance. First, we forbear here only to the extent of our authority under section 10 of the Act. Section 10 provides that "the Commission shall forbear from applying any regulation or any provision of this chapter to a telecommunications carrier or telecommunications service, or class of telecommunications carriers or telecommunications services" if certain conditions are met. Certain provisions or regulations do not fall within the categories of provisions of the Act or Commission regulations encompassed by that language because they are not applied to telecommunications carriers or telecommunications services, and we consequently do not forbear as to those provisions or regulations.

529. Second, we do not forbear from provisions or regulations that are not newly triggered by the classification of broadband Internet access service. The 2014 Open Internet NPRM sought comment on possible forbearance premised on addressing the consequences that flowed from any classification decisions it might adopt. Although some commenters include sweeping requests that we forbear from all of Title II or the like, in practice, they, too, appear focused on the consequences of classification decisions. Nor do we find on the record here that the section 10 criteria met with respect to such forbearance, and in particular do not find it in the public interest, in the context of this item, to forbear with respect to requirements that already applied to broadband Internet access service and providers of that service prior to this Order. Rather, broadband providers remain free to seek relief from such provisions or regulations through appropriate filings with the Commissions.

530. A number of commenters' arguments are addressed on one or more of these grounds. (In addition to those discussed below, these considerations explain, for example, why we do not grant forbearance with respect to sections 303(b), 303(r) and 316, upon which we rely for authority for our open Internet rules.) For example, as to the first set of exclusions, we note that section 257 imposes certain obligations on the Commission without creating enforceable obligations that the Commission would apply to telecommunications carriers or telecommunications services, so we do not forbear from applying those provisions. For the same reasons, we do not forbear with respect to provisions insofar as they merely reserve state authority.

531. We further note, for example, that the immunity from liability in section 230(c) applies to providers or users of an "interactive computer service," and its application does not vary based on the classification of broadband Internet access service here. Consequently, it is not covered by the scope of forbearance in this order. We also note that the restrictions on obscene and illicit content in sections 223 and 231(to the extent enforced)-as well as the associated limitations on liability—in many cases, do not vary with the classification decisions in this Order, and thus likewise are not encompassed by the forbearance in this Order. (As a narrow exception to this general conclusion, section 223(c)(1) conceivably could be newly applied to broadband providers by virtue of the classification decisions in this Order. No commenter meaningfully argues that the Commission should apply this provision to broadband providers, and that fact, coupled with the other protections that remain, persuade us that, insofar as the Commission would apply this provision, such application is not necessary for purposes of sections 10(a)(1) and (a)(2). Likewise, consistent with the tailored regulatory approach adopted in this Order, we find it in the public interest under section 10(a)(3) to forbear insofar as the Commission otherwise would newly apply that provision to a broadband provider as a result of this Order.) To the extent that certain of these provisions would benefit broadband providers and could instead be viewed as provisions that are newly applied to broadband providers by virtue of the classification decisions in this Order, it would better promote broadband deployment, and thus better serve the public interest, if we continue to apply those provisions. We thus find

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that such forbearance would not be in the public interest under section 10(a)(3).

532. Some commenters also advocate that the Commission not forbear from applying "the provisions of the Communications Assistan[ce] for Law Enforcement Act under section 229." Section 229(a)-(d) direct the Commission to adopt rules implementing the requirements of CALEA and authorize the Commission to investigate and enforce those rules. Section 229(e) enables providers to recover certain costs of CALEA compliance. Section 229 is not, by its terms, limited to "telecommunications services" as defined by the Communication Act, and CALEA obligations already apply to broadband Internet access service. Thus, in carrying out section 229, the Commission's role already extended to broadband Internet service, and all telecommunications carriers subject to CALEA are already required to comply with all Commission rules adopted pursuant to section 229. Declining to forbear from applying section 229 and our associated rules is consistent with the overall approach, discussed above, of focusing on addressing newly-arising requirements flowing from our classification decision, and thus is in the public interest. Given that CALEA's statutory obligations will apply regardless of any forbearance granted by the Commission under the Communications Act, and given the lack of any substantial argument in the record in favor of forbearance from section 229, we conclude that maintaining the Commission's existing rulemaking and oversight role as established by section 229 better advances the public interest. As services and technologies evolve over time, CALEA implementation will need to evolve as well. Section 229 establishes a rulemaking and oversight role for the Commission that helps enable those future changes. If we were to forbear from section 229 (assuming arguendo that we could find the forbearance standard to be satisfied), we thus would frustrate the ability of CALEA implementation to evolve with technology, an outcome that we find fundamentally inconsistent with the continued applicability of CALEA itself and therefore with the public interest.

533. We also do not forbear from certain rules governing the wireless licensing process. First, our rules require applicants for licenses under our flexible use rules to designate the regulatory status of proposed services (*i.e.*, common carrier, non-common carrier, or both) in the initial license application, and make subsequent amendment to the designation, as necessary. With regard to these rules, we find that forbearance of the regulatory status designation would result in inaccurate license information and therefore is not warranted. In particular, we conclude that such forbearance would be contrary to the public interest under section 10(a)(3).

534. Second, sections 1.933 and 1.939 of our rules, 47 CFR 1.933, 1.939, implementing sections 309(b) and (d)(1) of the Act, 47 U.S.C. 309(b), (d)(1), set out processes for license applications for authorization, major modification, major amendment, substantial assignment, or transfer. Applications that involve, in whole or in part, licenses to be used for "Wireless Telecommunications Services," as defined in section 1.907 of our rules, are subject to a public notice process providing opportunity for petitions to deny, but applications that involve only "Private Wireless Services," as defined in section 1.907 of our rules are not subject to that process.

535. With regard to these rules, we find that reclassification is unlikely to trigger a different process under these rules, for two reasons. We note that mobile BIAS today is being provided using licenses that are governed under our flexible use rules (*i.e.*, under parts 20, 22, 24, 26, and 27) and that are being used as well to provide services, such as mobile voice, already provided as CMRS. Thus, these applications have been subject to these provisions because they have also been used to provide CMRS services. To the extent applicants seek licenses for reclassified service under other parts, such as Part 101, or are otherwise not covered by the above reasoning, we find that forbearance from these procedures is not warranted, as the public notice process requirements are important to ensure that common carrier licensing serves the public interest. Accordingly, we do not find forbearance from applying these rules in the public interest under section 10(a)(3), and thus we do not forbear from application of section 309(b) and (d)(1) of the Act, or from rules 1.931, 1.933, 1.939, 22,1110, and 27,10.

D. Potential Objections to Our General Approach to Forbearance for Broadband Internet Access Service

536. While we address above specific arguments against forbearance as to particular provisions or requirements, we note that we also reject certain overarching concerns about our forbearance decision here. For one, we grant substantial forbearance in this item, rather than deferring such

forbearance decisions to future proceedings. We are able to conclude on this record that the section 10(a) criteria are met with respect to the forbearance we grant, and taking such action here enables us to strike the right regulatory and deregulatory balance regarding broadband Internet access service, as discussed above. Under these circumstances we reject arguments that we should defer forbearance to future proceedings. Likewise, given our finding that the section 10(a) criteria are met for the forbearance adopted here, we reject generalized arguments that the scope of forbearance here should be the same as that historically granted in the CMRS context. We conclude that such overarching claims do not address distinguishing factors here, including our decision that it is in the public interest to proceed incrementally given the regulatory experience of the nearterm past coupled with the Commission's responsibilities under section 706 of the 1996 Act, as discussed above. Further, because we grant substantial forbearance in this Order rather than deferring those issues to a future proceeding, we also reject concerns that the process of obtaining forbearance will be burdensome or uncertain, insofar as they are based on a presumption that such relief only would be granted via subsequent proceedings. (The posture here is distinguishable from the circumstances underlying the Brand X case, where a court had classified cable modem service as a telecommunications service without simultaneous forbearance of the sort we adopt here, and thus we reject arguments seeking to rely on court filings there.)

537. Nor are we persuaded by arguments that the adoption of interim rules or the stay of all but certain rules should be used in lieu of forbearance, since those arguments do not explain in meaningful detail what specific interim rules would be adopted or the scope of what rules would be excluded from any stay, nor how, absent forbearance, interim rules or a stay by the Commission could address requirements imposed by the Act, rather than merely by Commission regulation. To the extent that commenters' arguments instead advocate that forbearance should be interim or timelimited, under today's approach, we retain adequate authority to modify our regulatory approach in the future, should circumstances warrant. We thus are not persuaded that there is any material, incremental advantage or benefit to adopting forbearance on an interim or time-limited basis.

538. We also reject claims that the Commission cannot grant forbearance here because it did not provide adequate notice and an opportunity for comment. We need not and do not address here whether forbearance is, in all cases, informal rulemaking, because in this instance we have, in fact, proceeded via rulemaking and provided sufficient notice and an opportunity to comment in that regard. section 553(b) and (c) of the APA requires agencies to give public notice of a proposed rulemaking that includes "either the terms or substance of the proposed rule or a description of the subjects and issues involved" and to give interested parties an opportunity to submit comments on the proposal. The notice "need not specify every precise proposal which [the agency] may ultimately adopt as a rule"; it need only "be sufficient to fairly apprise interested parties of the issues involved." Moreover, the APA's notice requirements are satisfied where the final rule is a "logical outgrowth" of the actions proposed. As long as parties should have anticipated that the rule ultimately adopted was possible, it is considered a "logical outgrowth" of the original proposal, and there is no violation of the APA's notice requirements.

539. Those notice standards are satisfied with respect to the forbearance adopted here. The 2014 Open Internet NPRM observed:

If the Commission were to reclassify broadband Internet access service as described above or classify a separate broadband service provided to edge providers as a "telecommunications service," such a service would then be subject to all of the requirements of the Act and Commission rules that would flow from the classification of a service as a telecommunications service or a common carrier service.

Citing section 10 of the Act, the Commission then sought comment "on the extent to which forbearance from certain provisions of the Act or our rules would be justified" should the Commission adopt such an approach "in order to strike the right balance between minimizing the regulatory burden on providers and ensuring that the public interest is served." (The Commission further sought comment on "which provisions should be exempt from forbearance and which should receive it" based on whether such action would "protect and promote Internet openness." *Id.* at 5616, para. 154. These are the factors that the Commission did, in fact, use in evaluating the section 10(a) criteria and deciding whether and how much forbearance to grant here.) "For mobile

broadband services," the Commission also sought "comment on the extent to which forbearance should apply, if the Commission were to classify mobile broadband Internet access service as a CMRS service subject to Title II.' Collectively, the Commission thus provided notice of possible forbearance as to any provision of the Act or Commission rules triggered by the classification of broadband Internet access service of the sort we adopt in this Order. (Within that scope, the Commission also sought more detailed comment on specific aspects of the possible forbearance it might adopt, discussing similar questions raised in the 2010 Broadband Classification NOI, particular statutory provisions from which the Commission might not forbear, and particular approaches the Commission might use to evaluating forbearance. Moreover, as discussed in the preceding sections above, the 2014 Open Internet NPRM yielded a robust record regarding forbearance.) The forbearance we grant here from applying certain provisions and regulations newly triggered by our classification decisions in order to strike the right regulatory balance for broadband Internet access services consistent with the objective of preserving and protecting Internet openness is squarely within that scope of notice provided by the 2014 Open Internet NPRM.

540. We also view as misguided complaints about the potential for our forbearance decisions to be challenged in court or reversed in the future by the Commission. Having concluded that broadband Internet access service is a telecommunications service, certain legal consequences under the Act flow from that by default. We grant in this order the substantial forbearance from those provision and other Commission regulations to the extent that we find warranted at this time under the section 10 framework. We thereby provide broadband providers significant regulatory certainty. (Perfect regulatory certainty would not be feasible under any classification. For example, even just as to rules adopted under section 706 of the 1996 Act parties theoretically could raise judicial challenges as to the adequacy of the Commission's rules in meeting the objectives of section 706 and a future Commission likewise might elect to modify those rules.) We thus are not persuaded to alter our approach to forbearance based on these arguments.

541. We recognize that in our approach to forbearance for broadband Internet access service above, we are not first exhaustively determining provision-by-provision and regulationby-regulation whether and how

particular provisions and rules apply to this service. The Commission has broad discretion whether to issue a declaratory ruling, which is what would be entailed by such an undertaking. We exercise our discretion not to do so here, except to the limited extent necessary to address arguments in the record regarding specific requirements. For one, the Commission need not resolve whether or how a provision or regulation applies before evaluating the section 10(a) criteria—rather, it can conduct that evaluation and, if warranted, grant forbearance within the scope of its section 10 authority assuming arguendo that the provisions or regulations apply. In addition, as discussed in greater detail above, the Commission is proceeding incrementally here. As the D.C. Circuit has recognized, within the statutory framework that Congress established, the Commission "possesses significant, albeit not unfettered, authority and discretion to settle on the best regulatory or deregulatory approach to broadband." Thus, to achieve the balance of regulatory and deregulatory policies adopted here for broadband Internet access service, we need not and thus do not-first resolve potentially complex and/or disputed interpretations and applications of the Act and Commission rules that could create precedent with unanticipated consequences for other services beyond the scope of this proceeding, and which would not alter the ultimate regulatory outcome in this Order in any event.

VI. Constitutional Considerations

542. The actions we take today are fully consistent with the Constitution. Some 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

543. 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.

544. 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.

545. Some commenters contend that because broadband providers distribute their own and third-party content to customers, rules that govern the transmission of Internet content over broadband networks violate their free speech rights. CenturyLink and others compare the operation of broadband Internet access service to "requiring a cable operator to carry all broadcast stations," and contend that the rules adopted today "displace access service providers' editorial control over their networks" which would otherwise constitute protected speech under the First Amendment. Other commenters respond that broadband providers are not engaged in speech when providing broadband Internet access services, so they are not entitled to First Amendment protections in their operation of these services. Consistent with our determination in the 2010 Open Internet Order, we find that when broadband providers offer broadband Internet access services, they act as conduits for the speech of others, not as speakers themselves.

546. 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."

547. Broadband providers' conduct with respect to broadband Internet access services does not satisfy this test, and analogies to other forms of media are unavailing. CenturyLink and others 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." (Likewise, while a newspaper publisher chooses which material to publish, broadband providers facilitate access to all or substantially all Internet endpoints. See Miami Herald Publishing Co. v. Tornillo, 418 U.S. 241, 257 (1974). In contrast, broadband Internet access services more closely resemble the "conduit for news, comment, and advertising" from which the Court distinguishes newspaper publishing.) 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.

548. 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. While these characteristics certainly involve transmission of others' speech, the accessed speech is not edited or controlled by the broadband provider but is directed by the end user. (To be sure, broadband providers engage in some reasonable network management designed to protect their networks from malicious content and to relieve congestion, but these practices bear little resemblance to the editorial discretion exercised by cable operators in choosing programming for their systems.) 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.

549. 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. (We further conclude that broadband providers' conduct is not sufficiently expressive to warrant First Amendment protection, as the provision of broadband Internet access services is not "inherently expressive," but would require significant explanatory speech to acquire any characteristics of speech.)

550. Our conclusion that broadband Internet access service providers act as conduits rather than speakers holds true regardless of how they are classified under the Act. But we think this is particularly evident given our classification of broadband Internet access services as telecommunications services subject to Title II. 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." The Act also provides for common carrier treatment of any provider to the extent it is engaged in providing telecommunications services. In the communications context, common carriage requires that end users "communicate or transmit intelligence of their own design and choosing." In section IV, we have found that broadband Internet access services fall within the definitions of "telecommunications" and "telecommunications services" subject to Title II common carrier regulation. By definition, then, the provision of telecommunications service does not involve the exercise of editorial control or judgment. (We also note that the requirement under Computer II that facilities-based providers of "enhanced services" separate out and offer on a common carrier basis the "basic service" transmission component underlying their enhanced services, a requirement reflected in the 1996 Act's distinction between

"telecommunications services" and "information services" was never held to raise First Amendment concerns. The Supreme Court has acknowledged the distinction between common carriers and entities with robust First Amendment rights in numerous contexts.)

551. 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. 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 being conveying a particularized message in the provision of broadband Internet access service.

552. 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.

553. 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 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 edgeprovider innovation that drives [the] 'virtuous cycle.' " As discussed above, this 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.

554. 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." (The Turner I Court continued: "Indeed, it has long been a basic tenet of national communications policy that the widest possible dissemination of information from diverse and antagonistic sources is essential to the welfare of the public.") 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.

555. 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.

556. Verizon also contends that the open Internet rules are impermissible under Citizens United because they result in differential treatment of providers of broadband service and other connected IP services. Our rules governing the practices of broadband providers differ markedly from the statutory restrictions on political speech at issue in *Citizens United*. Our rules do not impact core political speech, where the "First Amendment has its fullest and most urgent application." By contrast, the open Internet rules apply only to the provision of broadband services in a commercial context, so reliance on the strict scrutiny standards applied in *Citizens United* is inapt. As described above, intermediate scrutiny under *Turner I* would be the controlling standard of review if broadband providers were found to be speakers. If a court were to find differential treatment under our rules, though, they would be justified under *Turner I* because speaker-based distinctions can be deemed permissible so long as they are "'justified by some special characteristic of' the particular medium being regulated.'" The ability and incentive of broadband providers to impose artificial scarcity and pick winners and losers in the provision of their last-mile broadband services is just such a special characteristic justifying differential treatment.

557. In sum, the rules we adopt today do not unconstitutionally burden any of

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the First Amendment rights held by broadband providers. Broadband providers are conduits, not speakers, with respect to broadband Internet access services. Even if they were engaged in speech with respect to these services, the rules we adopt today are tailored to the important government interest in maintaining an open Internet as a platform for expression, among other things.

2. Compelled Disclosure

558. The disclosure requirements adopted as a part of our transparency rule also fall well within the confines of the First Amendment. As explained above, these required disclosures serve important government purposes, ensuring that end users and edge providers have accurate and accessible information about broadband providers' services. This information is central both to preventing consumer deception and to the operation of the virtuous cycle of innovation, consumer demand, and broadband deployment.

559. CenturyLink contends that the disclosure requirements under the transparency rule violate the First Amendment by compelling speech without a reasonable basis. They argue that the Commission has not established a potential problem which these disclosures are necessary to remedy and that this is fatal to the rules under the First Amendment. This argument misapprehends both the factual justification for the transparency rules and the constitutional legal standard against which any disclosure requirements would be evaluated by the courts.

560. The Supreme Court has made plain in Zauderer v. Office of Disciplinary Counsel of Supreme Court of Ohio that the government has broad discretion in requiring the disclosure of information to prevent consumer deception and ensure complete information in the marketplace. Under Zauderer's rational basis test, mandatory factual disclosures will be sustained "as long as disclosure requirements are reasonably related to the State's interest in preventing deception to consumers." As the Court observed, "the First Amendment interests implicated by disclosure requirements are substantially weaker than those at stake when speech is actually suppressed;" the speaker's interest is "minimal." The D.C. Circuit recently reaffirmed these principles in American Meat Institute v. United States Department of Agriculture, an en banc decision in which the Court joined the First and Second Circuit Courts of Appeals in recognizing that other

government interests beyond preventing consumer deception may be invoked to sustain a disclosure mandate under *Zauderer.*

561. The transparency rule clearly passes muster under these precedents. Preventing consumer deception in the broadband Internet access services market lies at the heart of the transparency rule we adopt today. The Commission has found that broadband providers have the incentive and ability to engage in harmful practices, as discussed above in section III.B.2. In the 2010 Open Internet Order, we found that "disclosure ensures that end users can make informed choices regarding the purchase and use of broadband service." Since the original transparency rule was promulgated, the Commission has received hundreds of complaints regarding advertised rates, slow or congested services, data caps, and other potentially deceptive practices. Similarly, the enhancements to the transparency rule which we adopt today are designed to prevent confusion to all consumers of the broadband providers' services-end-users and edge providers alike. Tailored disclosures promise to provide a metric against which these customers can judge whether their broadband connections satisfy the speeds, bandwidth, and other terms advertised by broadband providers.

562. Further buttressing these disclosure requirements are numerous other government interests permitted under American Meat Institute. As acknowledged by the D.C. Circuit in *Verizon,* broadband providers have both the economic incentive and the technical ability to interfere with thirdparty edge providers' services by imposing discriminatory restrictions on access and priority. The disclosures we require under today's transparency rule serve to curb those incentives by shedding light on the business practices of broadband providers. Accurate information about broadband provider practices encourages the competition, innovation, and high-quality services that drive consumer demand and broadband investment and deployment. Tailored disclosures further amplify these positive effects by ensuring that edge providers have critical network information necessary to develop innovative new applications and services and that end users have confidence in the broadband providers' network management and business practices. In sum, the other government interests supporting the rules in addition to preventing consumer deception-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—are substantial and justify our transparency requirements.

B. Fifth Amendment Takings

563. The open Internet rules also present no cognizable claims under the Fifth Amendment's Takings Clause. Today's decision simply identifies as common carriage the services that broadband Internet access service providers already offer in a manner that carries with it certain statutory duties. Regulatory enforcement of those duties has never been held to raise takings concerns. Correspondingly, our rules do not rise to the level of a per se taking because they do not grant third parties a right to physical occupation of the broadband providers' property. Finally, they do not constitute a regulatory taking because they actually enhance the value of broadband networks by protecting the virtuous cycle that drives innovation, user adoption, and infrastructure investment.

564. As an initial matter, we note that our reclassification of broadband Internet access service does not result from compelling the common carriage offering of those services, contrary to the claims of some broadband providers. Rather, our decision simply identifies as common carriage the services that broadband Internet access service providers already voluntarily offer in a manner that, under the Communications Act, carries with it certain statutory duties, which have never been held to raise takings concerns. Today's Order recognizes that broadband Internet access service is a telecommunications service under Title II of the Act. While certain common carriage obligations attach to recognition of this fact, those requirements operate by virtue of the statutory structure we interpret, not in service to a discretionary "policy goal the Commission seeks to advance.' Such statutory obligations have never before posed takings issues, and we conclude that today's Order, likewise, does not violate the Fifth Amendment.

565. Verizon specifically contends that without either a finding of monopoly power or a restriction on government entry, "compelled common carriage would constitute a government taking." They cite approvingly Judge Wilkey's observation in *NARUC I* that "early common carriage regulations were 'challenged as deprivations of property without due process." However, Judge Wilkey continues in the next sentence to explain that Congress has regularly imposed common carrier obligations without a showing of monopoly power or entry restrictions. Verizon's suggestion, when extended to its logical conclusion, would necessitate rendering unconstitutional any common carriage obligations outside of true government-sponsored monopolies. The courts have taken a much narrower view of both the characteristics necessary for common carrier status and the effect of that status on takings claims when present in a non-monopoly context. Correspondingly, we conclude that today's classifications, without a showing of monopoly power do not constitute takings under the Fifth Amendment.

1. Per Se Takings

566. Some commenters argue that our rules would effect a *per se* taking by granting third parties a perpetual easement onto broadband providers' facilities, a form of physical occupation. These arguments mischaracterize the nature of the rules we adopt today and misapply Fifth Amendment jurisprudence. To qualify as a per se taking, the challenged government action must authorize a permanent physical occupation of private property. (The government may also commit a per se taking by completely depriving an owner of all economically beneficial use of her property. However, the record does not reflect a concern among commenters that our actions today deprive broadband providers of all economically beneficial use of their property-nor do we find one meritedso we limit our discussion to the permanent physical occupation variety of per se takings.) This rule, however, is "very narrow" and it does not "question the equally substantial authority upholding a State's broad power to impose appropriate restrictions upon an owner's use of his property." The Supreme Court has advised that a per se taking is "relatively rare and easily identified" and "presents relatively few problems of proof."

567. Under this formulation, today's Order does not impose a per se taking on broadband providers. Regulation of the transmissions travelling over a broadband providers' property differs substantially from physical occupations which are the hallmark of per se takings, such as the installation of cable equipment at issue in *Loretto* v. *Teleprompter CATV Corp.* We do not require the permanent installation of any third-party equipment at broadband providers' network facilities, or deprive broadband providers of existing property interests in their networks-a broadband provider retains complete control over its property. (The Supreme Court has further cabined this per se

takings rule by noting that some permanent incursions onto private property could be acceptable if the property owner owned the installation and retained discretion in how to deploy it. Were our rules found to impose a permanent physical occupation on broadband providers' networks, broadband services seem to fall squarely within this exception. Broadband Internet access services are characterized as distinctly user-directed. Further, providers retain discretion in the deployment of their facilities and are free to manage traffic through reasonable network management.) Our rules merely regulate the *use* of a broadband Internet access provider's network—they are neither physical nor permanent occupations of private property. Courts have repeatedly declined to extend per se takings analysis to rules regulating the transmission of communications traffic over a provider's facilities, and we believe that these decisions comport with the Supreme Court's perspective that permanent physical occupation of property is a narrow category of takings jurisprudence and is "easily identifiable" when it does occur.

568. Moreover, to the extent that broadband providers voluntarily open their networks to end users and edge providers, reasonable regulation of the use of their property poses no takings issue. When owners voluntarily invite others onto their property-through contract or otherwise-the courts will not find that a permanent physical occupation has occurred. So long as property owners remain free to avoid physical incursions on their property by discontinuing the services to which it has been dedicated, reasonable conduct regulations can be imposed on the use of such properties without raising *per se* takings concerns. In point of fact, broadband providers regularly invite third parties to transmit signals through their physical facilities by contracting with end users to provide broadband Internet access service and promising access to all or substantially all Internet endpoints. Our rules do not compel broadband providers to offer this service-instead our rules simply regulate broadband providers' conduct with respect to traffic which currently freely flows over their facilities. Thus, to the extent that broadband providers allow any customer to transmit or receive information over its network, the imposition of reasonable conduct rules on the provision of broadband Internet access services does not constitute a *per se* taking. Furthermore, even if the rules did impose a type of

physical occupation on the facilities of broadband providers, such an imposition is not an unconstitutional taking because broadband providers are compensated for the traffic passing over their networks. (With respect to the rules governing the broadband Internet access service, broadband providers are compensated through the imposition of subscription fees on their end users.)

2. Regulatory Takings

569. Nor do the rules we adopt today constitute a regulatory taking. Outside of *per se* takings cases, courts analyze putative government takings through "essentially ad hoc, factual inquiries" into a variety of unweighted factors such as the "economic impact of the regulation," the degree of interference with "investment-backed expectations," and "the character of the government action." Directing analysis of these factors is a common touchstonewhether the regulatory actions taken are "functionally equivalent to the classic taking in which government directly appropriates private property or ousts the owner from his domain." Open Internet rules do not implicate such a deprivation of value or control over the networks of broadband providers, and so pose no regulatory takings issues.

570. The economic impact of the rules we adopt today is limited because, in most circumstances, the Internet operates in an open manner today. Indeed, rather than reducing the value of broadband provider property, today's rules likely serve to enhance the value of broadband networks by promoting innovation on the edge of the network, thereby driving consumer demand for broadband Internet access and increasing the networks' value. Further, today's Order does not so burden broadband providers' discretion in managing and deploying their networks to effectively "oust" them from ownership and control of their networks. While we have adopted a set of bright-line rules today for some practices, broadband providers are still afforded a great deal of discretion to enter into individualized arrangements with respect to the provision of broadband Internet access services under the no-unreasonable interference/ disadvantage standard. The limited scope of the open Internet rules also injects flexibility into our regulatory framework and provides sufficient property protections to take our rules outside the ambit of the Fifth Amendment.

571. Likewise, any investment backed expectations of broadband providers in prior regulatory regimes are minimal. As a general matter, property owners

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cannot expect that existing legal requirements regarding their property will remain entirely unchanged. (Additionally, persons operating in a regulated environment develop fewer reliance interests in industries subject to comprehensive regulation.) The Commission has long regulated Internet access services, and there is no doubt that broadband Internet "falls comfortably within the Commission's jurisdiction." Indeed, with respect to broadband Internet access service, claims by broadband providers that our previous regulatory treatment of broadband engendered reliance interests runs counter to the plain language of the 2002 Cable Modem Declaratory Ruling and the 2005 Wireline Broadband Classification Order, both of which contained notices of proposed rulemaking seeking comment on the retention of Title II-like regulation of those services. Also, because we do not propose to regulate ex ante broadband providers' ability to set market rates for the broadband Internet access services they offer, there is no reason to believe that our ruling will deprive broadband providers of the just compensation that is a full answer to any takings claim.

572. In characterizing our proposed rules as a regulatory taking, CenturyLink looks to Kaiser Aetna, a case in which the government sought to establish public access rights to a private marina by classifying it as "navigable waters of the United States. As described above, we think that analogies to real property incursions are inapplicable to the provision of broadband Internet access services. In any event, the facts of Kaiser bear little resemblance to the rights and interests implicated by broadband networks. Unlike the small, privately held marina which was not open to the public in Kaiser Aetna, broadband Internet access service involves access to substantially all Internet endpoints. While the marina in Kaiser Aetna maintained a small fee-paying membership, broadband Internet access services are offered directly to the public at large, as we recognize in their classification as telecommunications services. In sum, open Internet rules do not so burden broadband provider's control and ownership of their networks as to rise to the level of a regulatory taking in violation of the Fifth Amendment. The economic impact of our rules is minimal and our classifications do not frustrate any significant reliance interests.

VII. Severability

573. We consider the actions we take today to be separate and severable such that in the event any particular action or

decision is staved or determined to be invalid, we would find that the resulting regulatory framework continues to fulfill our goal of preserving and protecting the open Internet and that it shall remain in effect to the fullest extent permitted by law. Though complementary, each of the rules, requirements, classifications, definitions, and other provisions that we establish in this Report and Order on Remand, Declaratory Ruling, and Order operate independently to promote the virtuous cycle, encourage the deployment of broadband on a timely basis, and protect the open Internet.

574. Severability of Open Internet Rules from One Another. The open Internet rules we adopt today each operate independently to protect the open Internet, promote the virtuous cycle, and encourage the deployment of broadband on a timely basis. The Verizon court recognized as much by holding our initial transparency rule severable from the non-discrimination and no blocking rules from the 2010 Open Internet Order. We apply that view to today's transparency rule, as well as to the no blocking, no throttling, and no paid prioritization rules and the no-unreasonable interference/ disadvantage adopted today. While today's rules put in place a suite of open Internet protections, we find that each of these rules, on its own, serves to protect the open Internet. Each rule protects against different potential harms and thus operates semiindependently from one another. For example, the no-blocking rule protects consumers' right to access lawful content, applications, and services by constraining broadband providers' incentive to block competitors' content. The no throttling rule serves as an independent supplement to this prohibition on blocking by banning the impairment or degradation of lawful content that does not reach the level of blocking. Should the no blocking rule be declared invalid, the no throttling rule would still afford consumers and edge providers significant protection, and thus could independently advance the goals of the open Internet, if not as comprehensively were the no blocking rule still in effect. The same reasoning holds true for the ban on paid prioritization, which protects against particular harms independent of the other bright-line rules. Finally, the nounreasonable interference/disadvantage standard governs broadband provider conduct generally, providing independent protections against those three harmful practices along with other and new practices that could threaten to

harm Internet openness. Were any of these individual rules held invalid, the resulting regulations would remain valuable tools for protecting the open Internet.

575. Severability of Rules Governing Mobile/Fixed Providers. We have also made clear today our rules apply to both fixed and mobile broadband service. These are two different services, and thus the application of our rules to either service functions independently. Accordingly, we find that should application of our open Internet rules to either fixed or mobile broadband Internet access services be held invalid, the application of those rules to the remaining mobile or fixed services would still fulfill our regulatory purposes and remain intact.

VIII. Procedural Matters

A. Regulatory Flexibility Analysis

576. As required by the Regulatory Flexibility Act (RFA), an Initial Regulatory Flexibility Analysis (IRFA) was incorporated into the 2014 Open Internet NPRM. The Commission sought written public comment on the possible significant economic impact on small entities regarding the proposals addressed in the Open Internet NPRM, including comments on the IRFA. Pursuant to the RFA, a Final Regulatory Flexibility Analysis is set forth in the Order.

B. Paperwork Reduction Act of 1995 Analysis

577. This document contains new information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. It will be submitted to the Office of Management and Budget (OMB) for review under section 3507(d) of the PRA. OMB, the general public, and other federal agencies are invited to comment on the new information collection requirements contained in this proceeding. In addition, we note that pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, see 44 U.S.C. 3506(c)(4), we previously sought specific comment on how the Commission might further reduce the information collection burden for small business concerns with fewer than 25 employees.

578. In this present document, we require broadband providers to publicly disclose accurate information regarding the commercial terms, performance, and network management practices of their broadband Internet access services sufficient for end users to make informed choices regarding use of such services and for content, application, service, and device providers to develop, market, and maintain Internet offerings. We have assessed the effects of this rule and find that any burden on small businesses will be minimal because (1) the rule gives broadband providers flexibility in how to implement the disclosure rule, and (2) the rule gives providers adequate time to develop cost-effective methods of compliance.

C. Congressional Review Act

579. The Commission will send a copy of this Report and Order to Congress and the Government Accountability Office pursuant to the Congressional Review Act, *see* 5 U.S.C. 801(a)(1)(A).

D. Data Quality Act

580. The Commission certifies that it has complied with the Office of Management and Budget Final Information Quality Bulletin for Peer Review, 70 FR 2664 (2005), and the Data Quality Act, Ex. Public Law 106–554 (2001), codified at 44 U.S.C. 3516 note, with regard to its reliance on influential scientific information in the Report and Order on Remand, Declaratory Ruling, and Order in GN Docket No. 14–28.

E. Accessible Formats

581. To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an email to *fcc504@ fcc.gov* or call the Consumer & Governmental Affairs Bureau at 202– 418–0530 (voice), 202–418–0432 (tty). Contact the FCC to request reasonable accommodations for filing comments (accessible format documents, sign language interpreters, CARTS, *etc.*) by email: *FCC504@fcc.gov*; phone: (202) 418–0530 (voice), (202) 418–0432 (TTY).

IX. Ordering Clauses

582. Accordingly, *it is ordered* that, pursuant to sections 1, 2, 3, 4, 10, 201, 202, 301, 303, 316, 332, 403, 501, and 503, of the Communications Act of 1934, as amended, and section 706 of the Telecommunications Act of 1996, as amended, 47 U.S.C. 151, 152, 153, 154, 160, 201, 202, 301, 303, 316, 332, 403, 501, 503, and 1302, this Report and Order on Remand, Declaratory Ruling, and Order *is adopted*.

583. *It is further ordered* that parts 1, 8, and 20 of the Commission's rules *are amended* as set forth in Appendix A of the Order.

584. *It is further ordered* that this Report and Order on Remand, Declaratory Ruling, and Order *shall be* effective June 12, 2015, except that the

modified information collection requirements in paragraphs 164, 166, 167, 169, 173, 174, 179, 180, and 181 of this document are not applicable until approved by the Office of Management and Budget (OMB). The Federal Communications Commission will publish a separate document in the Federal Register announcing such approval and the relevant effective date(s). It is our intention in adopting the foregoing Declaratory Ruling and these rule changes that, if any provision of the Declaratory Ruling or the rules, or the application thereof to any person or circumstance, is held to be unlawful, the remaining portions of such Declaratory Ruling and the rules not deemed unlawful, and the application of such Declaratory Ruling and the rules to other person or circumstances, shall remain in effect to the fullest extent permitted by law.

585. *It is further ordered* that the Commission's Consumer & Governmental Affairs Bureau, Reference Information Center, *shall send* a copy of Report and Order on Remand, Declaratory Ruling, and Order to Congress and the Government Accountability Office pursuant to the Congressional Review Act, *see* 5 U.S.C. 801(a)(1)(A).

586. *It is further ordered*, that the Commission's Consumer & Governmental Affairs Bureau, Reference Information Center, *shall send* a copy of this Report and Order on Remand, Declaratory Ruling, and Order, including the Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

587. *It is further ordered* that the Mozilla Petition to Recognize Remote Delivery Services in Terminating Access Networks and Classify Such Services as Telecommunications Services Under Title II of the Communications Act is *denied*.

X. Final Regulatory Flexibility Analysis

588. As required by the Regulatory Flexibility Act of 1980 (RFA), as amended, Initial Regulatory Flexibility Analyses (IRFAs) were incorporated in the Notice of Proposed Rule Making (2014 Open Internet NPRM) for this proceeding. The Commission sought written public comment on the proposals in the 2014 Open Internet NPRM, including comment on the IRFA. The Commission received comments on the 2014 Open Internet NPRM IRFA, which are discussed below. This present Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.

A. Need for, and Objectives of, the Proposed Rules

589. In its remand of the Commission's Open Internet Order, the D.C. Circuit affirmed the underlying basis for the Commission's open Internet rules, holding that "the Commission [had] more than adequately supported and explained its conclusion that edge provider innovation leads to the expansion and improvement of broadband infrastructure." The court also found "reasonable and grounded in substantial evidence" the Commission's finding that Internet openness fosters the edge provider innovation that drives the virtuous cycle. Open Internet rules benefit investors, innovators, and end users by providing more certainty to each regarding broadband providers' behavior, and helping to ensure the market is conducive to optimal use of the Internet. Further, openness promotes the Internet's ability to act as a platform for speech and civic engagement, and can help close the digital divide by facilitating the development of diverse content, applications, and services. The record on remand convinces us 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.

590. The Commission's historical open Internet policies and rules have blunted broadband providers' incentives to engage in behavior harmful to the open Internet. Commenters who argue that rules are not necessary overlook the role that the Commission's rules and policies have played in fostering that result. Without rules in place to protect the open Internet, the overwhelming incentives broadband providers have to act in ways that are harmful to investment and innovation threaten both broadband networks and edge content. Accordingly, in the Order, we set a clear scope for and subsequently adopt a number of rules to address such harmful conduct.

591. First, we note that despite traffic exchange's inclusion in the definition and classification of broadband Internet access service, we do not apply the Commission's conduct-based rules to traffic exchange today. Instead, we utilize the regulatory backstop of sections 201 and 202, as well as related enforcement provisions, to provide oversight over traffic exchange arrangements between a broadband Internet access service provider and other networks. Our definition of broadband Internet access service includes services "by wire or radio," and thus the open Internet rules we adopt apply to both fixed and mobile broadband Internet access services. The record demonstrates the pressing need to apply open Internet rules to fixed and mobile broadband Internet access services alike, and as such, the Commission's prior justifications for treating mobile and fixed services differently under the rules are no longer relevant.

592. We adopt a bright-line rule prohibiting broadband providers from blocking lawful content, applications, services, or non-harmful devices. The no-blocking rule applies to all traffic transmitted to or from end users of a broadband Internet access service, including traffic that may not fit clearly into any of these categories. Further, the no-blocking rule only applies to transmissions of lawful content and does not prevent or restrict a broadband provider from refusing to transmit unlawful material, such as child pornography or copyright-infringing materials. We believe that this approach will allow broadband providers to honor their service commitments to their subscribers without requiring a specified level of service to those subscribers or edge providers under the no-blocking rule. We further believe that the separate no-throttling rule provides appropriate protections against harmful conduct that degrades traffic but does not constitute outright blocking.

593. We also adopt a separate brightline rule prohibiting broadband providers from impairing or degrading lawful Internet traffic on the basis of content, application, service, or use of a non-harmful device. While certain broadband provider conduct may result in degradation of an end user's Internet experience that is tantamount to blocking, we believe that this conduct requires delineation in an explicit rule rather than through commentary as part of the no-blocking rule. We interpret throttling to mean any conduct by a broadband Internet access service provider that impairs, degrades, slows down, or renders effectively unusable particular content, services, applications, or devices, which is not reasonable network management. We find this prohibition to be as necessary as a rule prohibiting blocking. Without an equally strong no-throttling rule, parties note that the no-blocking rule will not be as effective because broadband providers might otherwise be able to engage in conduct that harms the open Internet but falls short of the outright blocking standard.

594. Under our bright-line rule banning paid prioritization, the

Commission will treat all paid prioritization as illegal under our rules except when, in rare circumstances, a broadband provider can convincingly show that its practice would affirmatively benefit the open Internet. Broadband providers may seek a waiver of this rule against paid prioritization, and we provide guidance to make clear the very limited circumstances in which the Commission would be willing to allow paid prioritization. In order to justify waiver, a party would need to demonstrate that a practice would provide some significant public interest benefit and would not harm the open nature of the Internet.

595. In addition to these three brightline rules, we also set forth a nounreasonable interference/disadvantage standard, under which the Commission can prohibit practices that unreasonably interfere with or unreasonably disadvantage consumers or edge providers, thus causing harm to the open Internet. This no-unreasonable interference/disadvantage standard will operate on a case-by-case basis and is designed to evaluate other broadband provider policies or practices-not covered by the bright-line rules— and prohibit those that could harm the open Internet. Under this rule, 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. This standard importantly allows us to prohibit practices that harm Internet openness, while still permitting innovative practices and creations that promote the virtuous cycle. (The Verizon court specifically touted the virtuous cycle as a worthy goal and within our authority.)

596. We note that the no-blocking, nothrottling, and no-unreasonable interference/disadvantage standard are all subject to reasonable network management. This network management exception is critical to allow broadband providers to optimize overall network performance and maintain a consistent quality experience for consumers. This exception does not apply to the paid prioritization rule because unlike conduct implicating the no-blocking, no-throttling, or no-unreasonable interference/disadvantage standard, paid prioritization is not a network management practice. We believe that this approach allows broadband providers to optimize overall network performance and maintain a consistent quality experience for consumers while carrying a variety of traffic over their networks.

597. In addition, we adopt our tentative conclusion in the 2014 Open Internet NPRM, that the Commission should not apply its conduct-based rules to services offered by broadband providers that share capacity with broadband Internet access service over providers' last-mile facilities, while closely monitoring the development of these services to ensure that broadband providers are not circumventing the open Internet rules. While the 2010 Open Internet Order and the 2014 Open Internet NPRM used the term "specialized services" to refer to these types of services, the term "non-BIAS data services" is a more accurate description for this class of services. These services may generally share the following characteristics: First, these services are not used to reach large parts of the Internet. Second, these services are not a generic platform—but rather a specific "application level" service. Finally, these services use some form of network management to isolate network capacity from broadband Internet access services: Physically, logically, statistically, or otherwise.

598. We also adopt enhancements to the existing transparency rule, which covers both content and format of disclosures by providers of broadband Internet access services. As the Commission has previously noted, disclosure requirements are among the least intrusive and most effective regulatory measures at its disposal. The enhanced transparency requirements adopted in the present Order serve the same purposes as those required under the 2010 Order: Providing critical information to serve end-user consumers, edge providers of broadband products and services, and the Internet community. Our enhancements to the existing transparency rule will better enable end-user consumers to make informed choices about broadband services by providing them with timely information tailored more specifically to their needs, and will similarly provide edge providers with the information necessary to develop new content, applications, services, and devices that promote the virtuous cycle of investment and innovation.

599. We anticipate that many disputes that will arise can and should be resolved by the parties without Commission involvement. We encourage parties to resolve disputes through informal discussions and private negotiations, but to the extent these methods are not practical, the Commission will continue to provide backstop mechanisms to address them. We continue to allow parties to file formal and informal complaints, and we will also proactively monitor compliance and take strong enforcement action against parties who violate the open Internet rules. In addition, we institute the use of advisory opinions similar to those issued by DOJ's Antitrust Division to provide clarity, guidance, and predictability concerning the open Internet rules. We also create an ombudsperson position that will serve as a point of contact for open Internet issues at the Commission to help consumers and edge providers direct their inquiries and complaints to the appropriate parties.

600. The legal basis for the Open Internet rules we adopt today relies on multiple sources of legal authority, including section 706, Title II, and Title III of the Communications Act. We conclude that the best approach to achieving our open Internet goals is to rely on several, independent, yet complementary sources of legal authority. Our authority under section 706 is not mutually exclusive with our authority under Titles II and III of the Act. Rather, we read our statute to provide independent sources of authority that work in concert toward common ends. Under section 706, the Commission has the authority to take certain regulatory steps to encourage and accelerate the deployment of broadband to all Americans. Under Title II, the Commission has authority to ensure that common carriers do not engage in unjust and unreasonable practices or preferences. And under Title III, the Commission has authority to protect the public interest through spectrum licensing. Each of these sources of authority provides an alternative ground to independently support our open Internet rules.

B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA

601. In response to the 2014 Open Internet NPRM, five entities filed comments, reply comments, and/or ex parte letters that specifically addressed the IRFA to some degree: ADTRAN, the American Cable Association (ACA), The National Cable & Telecommunications Association (NCTA), NTCA—the Rural Broadband Association (NTCA), and the Wireless Internet Service Providers Association (WISPA). Some of these, as well as other entities filed comments or

ex parte letters that more generally considered the small business impact of our proposals. The Office of Advocacy of the Small Business Administration (SBA) also filed a letter encouraging the FCC to use the RFA to reach out to small businesses in the course of the proceeding. The SBA particularly encouraged the Commission to "exercise appropriate caution in tailoring its final rules to mitigate any anticompetitive pressure on small broadband providers as well." We considered the proposals and concerns described by the various commenters, including the SBA, when composing the Order and accompanying rules.

602. Some commenters expressed concern that in the IRFA, we had not adequately considered the varying sizes of broadband providers and the effect of our proposals on smaller entities. Contrary to these concerns, when making the determination reflected in the Order, we carefully considered the impact of our actions on small entities. The record also reflects small entities' concern that the rules proposed in the 2014 Open Internet NPRM did not include sufficient protection for small edge providers and broadband providers. Thus, the rules adopted in the Order reflect a careful consideration of the impact that our rules will have both on small edge providers and on small broadband providers. The record also reflects the concerns of some commenters that enhanced transparency requirements will be particularly burdensome for smaller providers. However, in the 2014 Open Internet NPRM IRFA, we specifically sought comment on whether there are ways the Commission or industry associations could reduce burdens on broadband providers in complying with the proposed enhanced transparency rule through the use of a voluntary industry standardized glossary, or through the creation of a dashboard that permits easy comparison of the policies, procedures, and prices of various broadband providers throughout the country.

603. NCTA and others also state that the IRFA was insufficiently specific considering the obligations and impact of the classification of broadband Internet access service as a Title II service. We disagree with this contention as well. We believe that the IRFA was adequate and that the opportunity for parties, including small entities, to comment in a publicly accessible docket on the proposals contained within the 2014 Open Internet NPRM was sufficient. The opportunity for comments, replies, and *ex parte* presentations more than

adequately shaped the universe of potential obligations that could stem from our final rules. This was reflected in the overwhelming outpouring of comment on the proposals contained in the NPRM: Including many comments by and on behalf of small entities. The IRFA described that the 2014 Open Internet NPRM sought comment on the best source of authority for protecting Internet openness, whether section 706, Title II of the Communications Act of 1934, as amended, and/or other sources of legal authority such as Title III of the Communications Act for wireless services.

C. Description and Estimate of the Number of Small Entities To Which the Rules Would Apply

604. The RFA directs agencies to provide a description of, and where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted. The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction." In addition, the term 'small business'' has the same meaning as the term "small-business concern' under the Small Business Act. A smallbusiness concern" is one which: (1) Is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.

1. Total Small Entities

605. Our proposed action, if implemented, may, over time, affect small entities that are not easily categorized at present. We therefore describe here, at the outset, three comprehensive, statutory small entity size standards. First, nationwide, there are a total of approximately 28.2 million small businesses, according to the SBA. In addition, a "small organization" is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field." Nationwide, as of 2007, there were approximately 1,621,315 small organizations. Finally, the term "small governmental jurisdiction" is defined generally as "governments of cities, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand." Census Bureau data for 2007 indicate that there were 89,476 local governmental jurisdictions in the United States. We estimate that, of this total, as many as 88,761 entities may qualify as "small governmental jurisdictions." Thus, we estimate that

most governmental jurisdictions are small.

2. Broadband Internet Access Service Providers

606. The rules adopted in the Order apply to broadband Internet access service providers. The Economic Census places these firms, whose services might include Voice over Internet Protocol (VoIP), in either of two categories, depending on whether the service is provided over the provider's own telecommunications facilities (e.g., cable and DSL ISPs), or over client-supplied telecommunications connections (e.g., dial-up ISPs). The former are within the category of Wired Telecommunications Carriers, which has an SBA small business size standard of 1,500 or fewer employees. These are also labeled "broadband." The latter are within the category of All Other

Telecommunications, which has a size standard of annual receipts of \$25 million or less. These are labeled nonbroadband. According to Census Bureau data for 2007, there were 3,188 firms in the first category, total, that operated for the entire year. Of this total, 3144 firms had employment of 999 or fewer employees, and 44 firms had employment of 1000 employees or more. For the second category, the data show that 1,274 firms operated for the entire year. Of those, 1,252 had annual receipts below \$25 million per year. Consequently, we estimate that the majority of broadband Internet access service provider firms are small entities.

607. The broadband Internet access service provider industry has changed since this definition was introduced in 2007. The data cited above may therefore include entities that no longer provide broadband Internet access service, and may exclude entities that now provide such service. To ensure that this FRFA describes the universe of small entities that our action might affect, we discuss in turn several different types of entities that might be providing broadband Internet access service. We note that, although we have no specific information on the number of small entities that provide broadband Internet access service over unlicensed spectrum, we include these entities in our Final Regulatory Flexibility Analysis.

3. Wireline Providers

608. Incumbent Local Exchange Carriers (Incumbent LECs). Neither the Commission nor the SBA has developed a small business size standard specifically for incumbent local exchange services. The closest applicable size standard under SBA

rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees. According to Commission data, 1,307 carriers reported that they were incumbent local exchange service providers. Of these 1,307 carriers, an estimated 1,006 have 1,500 or fewer employees and 301 have more than 1,500 employees. Consequently, the Commission estimates that most providers of incumbent local exchange service are small businesses that may be affected by rules adopted pursuant to the Order.

609. Competitive Local Exchange Carriers (Competitive LECs), Competitive Access Providers (CAPs), Shared-Tenant Service Providers. and Other Local Service Providers. Neither the Commission nor the SBA has developed a small business size standard specifically for these service providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees. According to Commission data, 1,442 carriers reported that they were engaged in the provision of either competitive local exchange services or competitive access provider services. Of these 1,442 carriers, an estimated 1,256 have 1,500 or fewer employees and 186 have more than 1,500 employees. In addition, 17 carriers have reported that they are Shared-Tenant Service Providers, and all 17 are estimated to have 1,500 or fewer employees. In addition, 72 carriers have reported that they are Other Local Service Providers. Of the 72, seventy have 1,500 or fewer employees and two have more than 1,500 employees. Consequently, the Commission estimates that most providers of competitive local exchange service, competitive access providers, Shared-Tenant Service Providers, and other local service providers are small entities that may be affected by rules adopted pursuant to the Order.

610. We have included small incumbent LECs in this present RFA analysis. As noted above, a "small business" under the RFA is one that, inter alia, meets the pertinent small business size standard (e.g., a telephone communications business having 1,500 or fewer employees), and "is not dominant in its field of operation." The SBA's Office of Advocacy contends that, for RFA purposes, small incumbent LECs are not dominant in their field of operation because any such dominance is not "national" in scope. We have therefore included small incumbent LECs in this RFA analysis, although we

emphasize that this RFA action has no effect on Commission analyses and determinations in other, non-RFA contexts.

611. Interexchange Carriers. Neither the Commission nor the SBA has developed a small business size standard specifically for providers of interexchange services. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees. According to Commission data, 359 carriers have reported that they are engaged in the provision of interexchange service. Of these, an estimated 317 have 1,500 or fewer employees and 42 have more than 1,500 employees. Consequently, the Commission estimates that the majority of IXCs are small entities that may be affected by rules adopted pursuant to the Order.

612. Operator Service Providers (OSPs). Neither the Commission nor the SBA has developed a small business size standard specifically for operator service providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees. According to Commission data, 33 carriers have reported that they are engaged in the provision of operator services. Of these, an estimated 31 have 1,500 or fewer employees and two have more than 1,500 employees. Consequently, the Commission estimates that the majority of OSPs are small entities that may be affected by rules adopted pursuant to the Order.

4. Wireless Providers—Fixed and Mobile

613. The broadband Internet access service provider category covered by this Order may cover multiple wireless firms and categories of regulated wireless services. Thus, to the extent the wireless services listed below are used by wireless firms for broadband Internet access service, the proposed actions may have an impact on those small businesses as set forth above and further below. In addition, for those services subject to auctions, we note that, as a general matter, the number of winning bidders that claim to qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Also, the Commission does not generally track subsequent business size unless, in the context of assignments and transfers or reportable eligibility

events, unjust enrichment issues are implicated.

604. Wireless Telecommunications Carriers (except Satellite). Since 2007, the Census Bureau has placed wireless firms within this new, broad, economic census category. Under the present and prior categories, the SBA has deemed a wireless business to be small if it has 1,500 or fewer employees. For the category of Wireless

Telecommunications Carriers (except Satellite), census data for 2007 show that there were 1,383 firms that operated for the entire year. Of this total, 1,368 firms had employment of 999 or fewer employees and 15 had employment of 1000 employees or more. Since all firms with fewer than 1,500 employees are considered small, given the total employment in the sector, we estimate that the vast majority of wireless firms are small.

605. Wireless Communications Services. This service can be used for fixed, mobile, radiolocation, and digital audio broadcasting satellite uses. The Commission defined "small business" for the wireless communications services (WCS) auction as an entity with average gross revenues of \$40 million for each of the three preceding years, and a "very small business" as an entity with average gross revenues of \$15 million for each of the three preceding years. The SBA has approved these definitions.

606. 1670–1675 MHz Services. This service can be used for fixed and mobile uses, except aeronautical mobile. An auction for one license in the 1670–1675 MHz band was conducted in 2003. One license was awarded. The winning bidder was not a small entity.

607. Wireless Telephony. Wireless telephony includes cellular, personal communications services, and specialized mobile radio telephony carriers. As noted, the SBA has developed a small business size standard for Wireless **Telecommunications Carriers (except** Satellite). Under the SBA small business size standard, a business is small if it has 1,500 or fewer employees. According to Commission data, 413 carriers reported that they were engaged in wireless telephony. Of these, an estimated 261 have 1.500 or fewer employees and 152 have more than 1,500 employees. Therefore, a little less than one third of these entities can be considered small.

608. Broadband Personal Communications Service. The broadband personal communications services (PCS) spectrum is divided into six frequency blocks designated A through F, and the Commission has held

auctions for each block. The Commission initially defined a "small business" for C- and F-Block licenses as an entity that has average gross revenues of \$40 million or less in the three previous calendar years. For F-Block licenses, an additional small business size standard for "very small business" was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years. These small business size standards, in the context of broadband PCS auctions, have been approved by the SBA. No small businesses within the SBA-approved small business size standards bid successfully for licenses in Blocks A and B. There were 90 winning bidders that claimed small business status in the first two C-Block auctions. A total of 93 bidders that claimed small business status won approximately 40 percent of the 1,479 licenses in the first auction for the D, E, and F Blocks. On April 15, 1999, the Commission completed the reauction of 347 C-, D-, E-, and F-Block licenses in Auction No. 22. Of the 57 winning bidders in that auction, 48 claimed small business status and won 277 licenses.

609. On January 26, 2001, the Commission completed the auction of 422 C and F Block Broadband PCS licenses in Auction No. 35. Of the 35 winning bidders in that auction, 29 claimed small business status. Subsequent events concerning Auction 35, including judicial and agency determinations, resulted in a total of 163 C and F Block licenses being available for grant. On February 15, 2005, the Commission completed an auction of 242 C-, D-, E-, and F-Block licenses in Auction No. 58. Of the 24 winning bidders in that auction, 16 claimed small business status and won 156 licenses. On May 21, 2007, the Commission completed an auction of 33 licenses in the A, C, and F Blocks in Auction No. 71. Of the 12 winning bidders in that auction, five claimed small business status and won 18 licenses. On August 20, 2008, the Commission completed the auction of 20 C-, D-, E-, and F-Block Broadband PCS licenses in Auction No. 78. Of the eight winning bidders for Broadband PCS licenses in that auction, six claimed small business status and won 14 licenses.

610. Specialized Mobile Radio Licenses. The Commission awards "small entity" bidding credits in auctions for Specialized Mobile Radio (SMR) geographic area licenses in the 800 MHz and 900 MHz bands to firms that had revenues of no more than \$15

million in each of the three previous calendar years. The Commission awards "very small entity" bidding credits to firms that had revenues of no more than \$3 million in each of the three previous calendar years. The SBA has approved these small business size standards for the 900 MHz Service. The Commission has held auctions for geographic area licenses in the 800 MHz and 900 MHz bands. The 900 MHz SMR auction began on December 5, 1995, and closed on April 15, 1996. Sixty bidders claiming that they qualified as small businesses under the \$15 million size standard won 263 geographic area licenses in the 900 MHz SMR band. The 800 MHz SMR auction for the upper 200 channels began on October 28, 1997, and was completed on December 8, 1997. Ten bidders claiming that they qualified as small businesses under the \$15 million size standard won 38 geographic area licenses for the upper 200 channels in the 800 MHz SMR band. A second auction for the 800 MHz band was held on January 10, 2002 and closed on January 17, 2002 and included 23 BEA licenses. One bidder claiming small business status won five licenses.

611. The auction of the 1,053 800 MHz SMR geographic area licenses for the General Category channels began on August 16, 2000, and was completed on September 1, 2000. Eleven bidders won 108 geographic area licenses for the General Category channels in the 800 MHz SMR band and qualified as small businesses under the \$15 million size standard. In an auction completed on December 5, 2000, a total of 2,800 Economic Area licenses in the lower 80 channels of the 800 MHz SMR service were awarded. Of the 22 winning bidders. 19 claimed small business status and won 129 licenses. Thus, combining all four auctions, 41 winning bidders for geographic licenses in the 800 MHz SMR band claimed status as small businesses.

612. In addition, there are numerous incumbent site-by-site SMR licenses and licensees with extended implementation authorizations in the 800 and 900 MHz bands. We do not know how many firms provide 800 MHz or 900 MHz geographic area SMR service pursuant to extended implementation authorizations, nor how many of these providers have annual revenues of no more than \$15 million. One firm has over \$15 million in revenues. In addition, we do not know how many of these firms have 1,500 or fewer employees, which is the SBAdetermined size standard. We assume, for purposes of this analysis, that all of the remaining extended implementation

authorizations are held by small entities, as defined by the SBA.

613. Lower 700 MHz Band Licenses. The Commission previously adopted criteria for defining three groups of small businesses for purposes of determining their eligibility for special provisions such as bidding credits. The Commission defined a "small business" as an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$40 million for the preceding three years. A "very small business" is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$15 million for the preceding three years. Additionally, the lower 700 MHz Šervice had a third category of small business status for Metropolitan/ Rural Service Area (MSA/RSA) licenses------which is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$3 million for the preceding three years. The SBA approved these small size standards. An auction of 740 licenses (one license in each of the 734 MSAs/RSAs and one license in each of the six Economic Area Groupings (EAGs)) commenced on August 27, 2002, and closed on September 18, 2002. Of the 740 licenses available for auction, 484 licenses were won by 102 winning bidders. Seventy-two of the winning bidders claimed small business, very small business or entrepreneur status and won a total of 329 licenses. A second auction commenced on May 28, 2003, closed on June 13, 2003, and included 256 licenses: 5 EAG licenses and 476 Cellular Market Area licenses. Seventeen winning bidders claimed small or very small business status and won 60 licenses, and nine winning bidders claimed entrepreneur status and won 154 licenses. On July 26, 2005, the Commission completed an auction of 5 licenses in the Lower 700 MHz band (Auction No. 60). There were three winning bidders for five licenses. All three winning bidders claimed small business status.

614. In 2007, the Commission reexamined its rules governing the 700 MHz band in the 700 MHz Second Report and Order. An auction of 700 MHz licenses commenced January 24, 2008 and closed on March 18, 2008, which included, 176 Economic Area licenses in the A Block, 734 Cellular Market Area licenses in the B Block, and 176 EA licenses in the E Block. Twenty winning bidders, claiming small business status (those with attributable average annual gross revenues that exceed \$15 million and do not exceed \$40 million for the preceding three years) won 49 licenses. Thirty three winning bidders claiming very small business status (those with attributable average annual gross revenues that do not exceed \$15 million for the preceding three years) won 325 licenses.

615. Upper 700 MHz Band Licenses. In the 700 MHz Second Report and *Order,* the Commission revised its rules regarding Upper 700 MHz licenses. On January 24, 2008, the Commission commenced Auction 73 in which several licenses in the Upper 700 MHz band were available for licensing: 12 Regional Economic Area Grouping licenses in the C Block, and one nationwide license in the D Block. The auction concluded on March 18, 2008, with 3 winning bidders claiming very small business status (those with attributable average annual gross revenues that do not exceed \$15 million for the preceding three years) and winning five licenses.

616. 700 MHz Guard Band Licensees. In 2000, in the 700 MHz Guard Band Order, the Commission adopted size standards for "small businesses" and "very small businesses" for purposes of determining their eligibility for special provisions such as bidding credits and installment payments. A small business in this service is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$40 million for the preceding three years. Additionally, a very small business is an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$15 million for the preceding three years. SBA approval of these definitions is not required. An auction of 52 Major Economic Area licenses commenced on September 6, 2000, and closed on September 21, 2000. Of the 104 licenses auctioned, 96 licenses were sold to nine bidders. Five of these bidders were small businesses that won a total of 26 licenses. A second auction of 700 MHz Guard Band licenses commenced on February 13, 2001, and closed on February 21, 2001. All eight of the licenses auctioned were sold to three bidders. One of these bidders was a small business that won a total of two licenses

617. Air-Ground Radiotelephone Service. The Commission has previously used the SBA's small business size standard applicable to Wireless Telecommunications Carriers (except Satellite), *i.e.*, an entity employing no more than 1,500 persons. There are approximately 100 licensees in the Air-Ground Radiotelephone Service, and

under that definition, we estimate that almost all of them qualify as small entities under the SBA definition. For purposes of assigning Air-Ground Radiotelephone Service licenses through competitive bidding, the Commission has defined "small business" as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the preceding three years not exceeding \$40 million. A "very small business" is defined as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the preceding three years not exceeding \$15 million. These definitions were approved by the SBA. In May 2006, the Commission completed an auction of nationwide commercial Air-Ground Radiotelephone Service licenses in the 800 MHz band (Auction No. 65). On June 2, 2006, the auction closed with two winning bidders winning two Air-Ground Radiotelephone Services licenses. Neither of the winning bidders claimed small business status.

618. AWS Services (1710–1755 MHz and 2110-2155 MHz bands (AWS-1); 1915-1920 MHz, 1995-2000 MHz, 2020-2025 MHz and 2175–2180 MHz bands (AWS-2); 2155-2175 MHz band (AWS-3)). For the AWS-1 bands, the Commission has defined a "small business" as an entity with average annual gross revenues for the preceding three years not exceeding \$40 million, and a "very small business" as an entity with average annual gross revenues for the preceding three years not exceeding \$15 million. For AWS-2 and AWS-3, although we do not know for certain which entities are likely to apply for these frequencies, we note that the AWS-1 bands are comparable to those used for cellular service and personal communications service. The Commission has not yet adopted size standards for the AWS-2 or AWS-3 bands but proposes to treat both AWS-2 and AWS-3 similarly to broadband PCS service and AWS-1 service due to the comparable capital requirements and other factors, such as issues involved in relocating incumbents and developing markets, technologies, and services.

619. 3650–3700 MHz band. In March 2005, the Commission released a *Report* and Order and Memorandum Opinion and Order that provides for nationwide, non-exclusive licensing of terrestrial operations, utilizing contention-based technologies, in the 3650 MHz band (*i.e.*, 3650–3700 MHz). As of April 2010, more than 1270 licenses have been granted and more than 7433 sites have been registered. The Commission has not developed a definition of small entities applicable to 3650–3700 MHz band nationwide, non-exclusive licensees. However, we estimate that the majority of these licensees are Internet Access Service Providers (ISPs) and that most of those licensees are small businesses.

620. Fixed Microwave Services. Microwave services include common carrier, private-operational fixed, and broadcast auxiliary radio services. They also include the Local Multipoint Distribution Service (LMDS), the Digital Electronic Message Service (DEMS), and the 24 GHz Service, where licensees can choose between common carrier and non-common carrier status. At present, there are approximately 36,708 common carrier fixed licensees and 59,291 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services. There are approximately 135 LMDS licensees, three DEMS licensees, and three 24 GHz licensees. The Commission has not yet defined a small business with respect to microwave services. For purposes of the FRFA, we will use the SBA's definition applicable to Wireless **Telecommunications Carriers (except** satellite)—*i.e.*, an entity with no more than 1,500 persons. Under the present and prior categories, the SBA has deemed a wireless business to be small if it has 1,500 or fewer employees. The Commission does not have data specifying the number of these licensees that have more than 1,500 employees, and thus is unable at this time to estimate with greater precision the number of fixed microwave service licensees that would qualify as small business concerns under the SBA's small business size standard. Consequently, the Commission estimates that there are up to 36,708 common carrier fixed licensees and up to 59,291 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services that may be small and may be affected by the rules and policies adopted herein. We note, however, that the common carrier

includes some large entities. 621. Broadband Radio Service and Educational Broadband Service. Broadband Radio Service systems, previously referred to as Multipoint Distribution Service (MDS) and Multichannel Multipoint Distribution Service (MMDS) systems, and "wireless cable," transmit video programming to subscribers and provide two-way high speed data operations using the microwave frequencies of the Broadband Radio Service (BRS) and Educational Broadband Service (EBS) (previously referred to as the

microwave fixed licensee category

Instructional Television Fixed Service (ITFS)). In connection with the 1996 BRS auction, the Commission established a small business size standard as an entity that had annual average gross revenues of no more than \$40 million in the previous three calendar years. The BRS auctions resulted in 67 successful bidders obtaining licensing opportunities for 493 Basic Trading Areas (BTAs). Of the 67 auction winners, 61 met the definition of a small business. BRS also includes licensees of stations authorized prior to the auction. At this time, we estimate that of the 61 small business BRS auction winners, 48 remain small business licensees. In addition to the 48 small businesses that hold BTA authorizations, there are approximately 392 incumbent BRS licensees that are considered small entities. After adding the number of small business auction licensees to the number of incumbent licensees not already counted, we find that there are currently approximately 440 BRS licensees that are defined as small businesses under either the SBA or the Commission's rules.

622. In 2009, the Commission conducted Auction 86, the sale of 78 licenses in the BRS areas. The Commission offered three levels of bidding credits: (i) A bidder with attributed average annual gross revenues that exceed \$15 million and do not exceed \$40 million for the preceding three years (small business) received a 15 percent discount on its winning bid; (ii) a bidder with attributed average annual gross revenues that exceed \$3 million and do not exceed \$15 million for the preceding three years (very small business) received a 25 percent discount on its winning bid; and (iii) a bidder with attributed average annual gross revenues that do not exceed \$3 million for the preceding three years (entrepreneur) received a 35 percent discount on its winning bid. Auction 86 concluded in 2009 with the sale of 61 licenses. Of the ten winning bidders, two bidders that claimed small business status won 4 licenses; one bidder that claimed very small business status won three licenses; and two bidders that claimed entrepreneur status won six licenses.

623. In addition, the SBA's Cable Television Distribution Services small business size standard is applicable to EBS. There are presently 2,436 EBS licensees. All but 100 of these licenses are held by educational institutions. Educational institutions are included in this analysis as small entities. Thus, we estimate that at least 2,336 licensees are small businesses. Since 2007, Cable Television Distribution Services have been defined within the broad economic census category of Wired Telecommunications Carriers; that category is defined as follows: "This industry comprises establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies." The SBA has developed a small business size standard for this category, which is: All such firms having 1,500 or fewer employees. To gauge small business prevalence for these cable services we must, however, use the most current census data that are based on the previous category of Cable and Other Program Distribution and its associated size standard; that size standard was: All such firms having \$13.5 million or less in annual receipts. According to Census Bureau data for 2007, there were a total of 996 firms in this category that operated for the entire year. Of this total, 948 firms had annual receipts of under \$10 million, and 48 firms had receipts of \$10 million or more but less than \$25 million. Thus, the majority of these firms can be considered small.

5. Satellite Service Providers

624. Satellite Telecommunications Providers. Two economic census categories address the satellite industry. The first category has a small business size standard of \$30 million or less in average annual receipts, under SBA rules. The second has a size standard of \$30 million or less in annual receipts.

625. The category of Satellite Telecommunications "comprises establishments primarily engaged in providing telecommunications services to other establishments in the telecommunications and broadcasting industries by forwarding and receiving communications signals via a system of satellites or reselling satellite telecommunications." For this category, Census Bureau data for 2007 show that there were a total of 570 firms that operated for the entire year. Of this total, 530 firms had annual receipts of under \$30 million, and 40 firms had receipts of over \$30 million. Consequently, we estimate that the majority of Satellite

Telecommunications firms are small entities that might be affected by our action.

626. The second category of Other Telecommunications comprises, *inter alia*, "establishments primarily engaged in providing specialized

telecommunications services, such as satellite tracking, communications telemetry, and radar station operation. This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities connected with one or more terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from, satellite systems." For this category, Census Bureau data for 2007 show that there were a total of 1,274 firms that operated for the entire year. Of this total, 1,252 had annual receipts below \$25 million per year. Consequently, we estimate that the majority of All Other Telecommunications firms are small entities that might be affected by our action.

6. Cable Service Providers

627. Because section 706 requires us to monitor the deployment of broadband using any technology, we anticipate that some broadband service providers may not provide telephone service. Accordingly, we describe below other types of firms that may provide broadband services, including cable companies, MDS providers, and utilities, among others.

628. Ćable and Other Program Distributors. Since 2007, these services have been defined within the broad economic census category of Wired Telecommunications Carriers; that category is defined as follows: "This industry comprises establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies." The SBA has developed a small business size standard for this category, which is: all such firms having 1,500 or fewer employees. To gauge small business prevalence for these cable services we must, however, use current census data that are based on the previous category of Cable and Other Program Distribution and its associated size standard; that size standard was: All such firms having \$13.5 million or less in annual receipts. According to Census Bureau data for 2007, there were a total of 2,048 firms in this category that operated for the entire year. Of this total, 1,393 firms had annual receipts of under \$10 million, and 655 firms had receipts of \$10 million or more. Thus, the majority of these firms can be considered small.

629. Cable Companies and Systems. The Commission has also developed its

own small business size standards, for the purpose of cable rate regulation. Under the Commission's rules, a "small cable company" is one serving 400,000 or fewer subscribers, nationwide. Industry data shows that there were 1,141 cable companies at the end of June 2012. Of this total, all but ten cable operators nationwide are small under this size standard. In addition, under the Commission's rules, a "small system" is a cable system serving 15,000 or fewer subscribers. Current Commission records show 4,945 cable systems nationwide. Of this total, 4,380 cable systems have less than 20,000 subscribers, and 565 systems have 20,000 or more subscribers, based on the same records. Thus, under this standard, we estimate that most cable systems are small entities.

630. Cable System Operators. The Communications Act of 1934, as amended, also contains a size standard for small cable system operators, which is "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than 1 percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed \$250,000,000." The Commission has determined that an operator serving fewer than 677,000 subscribers shall be deemed a small operator, if its annual revenues. when combined with the total annual revenues of all its affiliates, do not exceed \$250 million in the aggregate. Based on available data, we find that all but ten incumbent cable operators are small entities under this size standard. We note that the Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed \$250 million, and therefore we are unable to estimate more accurately the number of cable system operators that would qualify as small under this size standard.

7. Electric Power Generators, Transmitters, and Distributors

631. Electric Power Generators, Transmitters, and Distributors. The Census Bureau defines an industry group comprised of "establishments, primarily engaged in generating, transmitting, and/or distributing electric power. Establishments in this industry group may perform one or more of the following activities: (1) Operate generation facilities that produce electric energy; (2) operate transmission systems that convey the electricity from the generation facility to the distribution system; and (3) operate distribution systems that convey electric power

received from the generation facility or the transmission system to the final consumer." The SBA has developed a small business size standard for firms in this category: "A firm is small if, including its affiliates, it is primarily engaged in the generation, transmission, and/or distribution of electric energy for sale and its total electric output for the preceding fiscal year did not exceed 4 million megawatt hours." Census Bureau data for 2007 show that there were 1,174 firms that operated for the entire year in this category. Of these firms, 50 had 1,000 employees or more, and 1,124 had fewer than 1,000 employees. Based on this data, a majority of these firms can be considered small.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities

632. The Order clarifies and adopts certain incremental enhancements to the existing transparency rule, which was adopted in 2010, and will continue to require providers of broadband Internet access services to "publicly disclose accurate information regarding the network management practices, performance, and commercial terms of its broadband Internet access services sufficient for consumers to make informed choices regarding use of such services and for content, application, service, and device providers to develop, market, and maintain Internet offerings." We summarize below the record keeping and reporting obligations of the accompanying Order. Additional information on each of these requirements can be found in the Order.

633. First, we clarify that all of the pieces of information described in paragraphs 56 and 98 of the 2010 Open Internet Order have been required as part of the current transparency rule, and we will continue to require the information as part of our enhanced rule. The only exception is the requirement to disclose "typical frequency of congestion," which we no longer require since it is superseded by more precise disclosures already required by the rule, such as actual performance. Also, the requirement that all disclosures made by a broadband provider be accurate includes the need to maintain the accuracy of these disclosures.

634. Second, we enhance and describe in more specific terms than in 2010 the information to be provided in disclosing commercial terms, network performance characteristics, and network practices. For example, in meeting the existing requirement to disclose "actual performance," providers of broadband Internet access services will be required to report packet loss, in addition to the already required metrics of speed and latency.

635. Third, we require that providers directly notify end users if their particular use of a network will trigger a network practice, based on a user's demand during more than the period of congestion, that is likely to have a significant impact on the end user's use of the service. The purpose of such notification is to provide the affected end users with sufficient information and time to consider adjusting their usage to avoid application of the practice.

636. Fourth, we establish a voluntary safe harbor that providers may use in meeting the existing requirement to make transparency disclosures in a format that meets the needs of end users. The safe harbor consists of the use of a standalone disclosure targeted to end users. Based on concerns raised in the record by smaller providers of broadband Internet access service, however, we do not at this time require use of this standalone format, and instead have submitted this issue to the Consumer Advisory Committee for further consideration.

E. Steps Taken To Minimize the Significant Economic Impact on Small Entities, and Significant Alternatives Considered

637. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include (among others) the following four alternatives: (1) The establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities: (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities. We have considered all of these factors subsequent to receiving substantive comments from the public and potentially affected entities. The Commission has considered the economic impact on small entities, as identified in comments filed in response to the 2014 Open *Internet NPRM* and its IRFA, in reaching its final conclusions and taking action in this proceeding.

638. We considered, for example, a variety of approaches to deal with paid prioritization, and we determined that a flat ban on paid prioritization has advantages over alternative approaches

identified in the record. We note that this approach relieves small edge providers, innovators, and consumers of the burden of detecting and challenging instances of harmful paid prioritization. Related to this issue, smaller edge providers expressed concern that they do not have the resources to fight against commercially unreasonable practices, which could result in an unfair playing field before the Commission. Still others argued that the standard would permit paid prioritization, which could disadvantage smaller entities and individuals. Given these concerns, we declined to adopt our proposed rule to prohibit practices that are not commercially reasonable. (Based on the record before us, we were persuaded that adopting a legal standard prohibiting commercially unreasonable practices is not the most effective or appropriate approach for protecting and promoting an open Internet.)

639. With regard to our nounreasonable interference/disadvantage standard, we were mindful that vague or unclear regulatory requirements could stymie rather than encourage innovation, and found that the approach we adopted provides sufficient certainty and guidance to consumers, broadband providers, and edge providers particularly smaller entities that might lack experience dealing with broadband providers—while also allowing parties flexibility in developing new services.

640. We found our existing informal complaint rule offers an accessible and effective mechanism for parties including consumers and small businesses with limited resources—to report possible noncompliance with our open Internet rules without being subject to burdensome evidentiary or pleading requirements. Accordingly we declined to adopt proposals modifying the existing standard.

641. We also decline to adopt arbitration procedures or to mandate arbitration for parties to open Internet complaint proceedings. Under the rules adopted today, parties are still free to engage in mediation and outside arbitration to settle their open Internet disputes, but alternative dispute resolution will not be required. We noted commenters' concerns that mandatory arbitration, in particular, may more frequently benefit the party with more resources and more understanding of dispute procedure, and therefore should not be adopted.

642. In formulating the enhanced disclosure requirements, we crafted rules that strike a balance between compliance burdens to industry and utility for end-user consumers, edge

providers, and the Internet community. We considered several additional metrics contemplated in the NPRM, but ultimately declined to require their disclosure in the Order, concluding that the adopted enhancements to transparency were sufficient to protect consumers. (For example, we do not require disclosure of the source of congestion due to the difficulty in determining the source, and the corresponding additional burden in requiring that information to be disclosed.) We also recognized with respect to the nature of disclosures that there are differences between fixed and mobile broadband networks.

643. The record reflects the concerns of some commenters that enhanced transparency requirements will be particularly burdensome for smaller providers. ACA, for example, suggests that smaller providers be exempted from the provision of such disclosures. ACA states that its member companies are complying with the current transparency requirements, which "strike the right balance between edge provider and consumer needs for pertinent information and the need to provide ISPs with some flexibility in how they disclose pertinent information." We believe that the enhanced requirements adopted herein are incremental in nature, but nevertheless necessary to provide enduser consumers, edge providers, and the Internet community with better information about the critical network performance metrics, practices, and commercial terms that have a direct impact on their use of the network. Customers of small broadband providers have an equal need for this information. However, out of an abundance of caution, we grant a temporary exemption for small providers, with the potential for that exemption to become permanent. We note that all providers of broadband Internet access service, including small providers, remain subject to the existing transparency rule adopted in 2010.

644. To ensure we have crafted rules that strike a balance between utility for consumers and compliance burdens for industry including smaller providers, we took certain additional important measures. For example, Commission staff continues to refine the mobile MBA program, which could at the appropriate time be declared a safe harbor for mobile broadband providers. In addition, we have declined to require certain disclosures proposed in the 2014 Open Internet NPRM such as the source of congestion, packet corruption, and jitter in recognition of commenter concerns with the benefits and difficulty of making these particular disclosures. Noting commenter concerns, we also decline to mandate separate tailored disclosures for different audiences (*e.g.* end users and edge providers) at this time. Lastly, we note that many of the enhanced disclosures specified in the Order may have been required under the current transparency rule. As a result, we believe the enhanced requirements make more explicit many of the existing requirements rather than imposing new regulatory burdens on providers that are in compliance with our current rule.

F. Report to Congress

645. The Commission will send a copy of the Order, including this FRFA, in a report to be sent to Congress and the Government Accountability Office pursuant to the Small Business Regulatory Enforcement Fairness Act of 1996. In addition, the Commission will send a copy of the Order, including the FRFA, to the Chief Counsel for Advocacy of the Small Business Administration. A copy of the Order and FRFA (or summaries thereof) will also be published in the **Federal Register**.

List of Subjects in 47 CFR Parts 1, 8, and 20

Cable television, Communications, Common carriers, Communications common carriers, Radio, Telecommunications, Telephone.

Federal Communications Commission. Marlene H. Dortch,

Secretary.

Secretary.

Final Rules

For the reasons discussed in the preamble, the Federal Communications Commission amends 47 CFR parts 1, 8 and 20 as follows:

PART 1—PRACTICE AND PROCEDURE

■ 1. The authority citation for part 1 continues to read as follows:

Authority: 15 U.S.C. 79, *et seq.;* 47 U.S.C. 151, 154(i), 154(j), 155, 157, 160, 201, 225, 227, 303, 309, 332, 1403, 1404, 1451, 1452, and 1455.

■ 2. Section 1.49 is amended by revising paragraph (f)(1)(i) to read as follows:

§ 1.49 Specifications as to pleadings and documents.

- * *
- (f) * * *
- (1) * * *

(i) Formal complaint proceedings under Section 208 of the Act and rules in §§ 1.720 through 1.736, pole attachment complaint proceedings under Section 224 of the Act and rules in §§ 1.1401 through 1.1424, and formal complaint proceedings under Open Internet rules §§ 8.12 through 8.17, and;

PART 8—PROTECTING AND PROMOTING THE OPEN INTERNET

■ 3. The authority citation for part 8 is revised to read as follows:

Authority: 47 U.S.C. 151, 152, 153, 154, 160, 201, 202, 301, 303, 316, 332, 403, 501, 503, and 1302.

■ 4. The heading for part 8 is revised as set forth above.

■ 5. Section 8.1 is revised to read as follows:

§8.1 Purpose.

The purpose of this part is to protect and promote the Internet as an open platform enabling consumer choice, freedom of expression, end-user control, competition, and the freedom to innovate without permission, and thereby to encourage the deployment of advanced telecommunications capability and remove barriers to infrastructure investment.

§8.11 [Redesignated as §8.2]

■ 6. Section 8.11 is redesignated as § 8.2 and is revised to read as follows:

§8.2 Definitions.

(a) Broadband Internet access service. 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.

(b) *Edge provider.* Any individual or entity that provides any content, application, or service over the Internet, and any individual or entity that provides a device used for accessing any content, application, or service over the Internet.

(c) *End user*. Any individual or entity that uses a broadband Internet access service.

(d) Fixed broadband Internet access service. A broadband Internet access service that serves end users primarily at fixed endpoints using stationary equipment. Fixed broadband Internet access service includes fixed wireless services (including fixed unlicensed wireless services), and fixed satellite services.

(e) *Mobile broadband Internet access service*. A broadband Internet access service that serves end users primarily using mobile stations.

(f) Reasonable network management. 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.

■ 7. Section 8.5 is revised to read as follows:

§8.5 No blocking.

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.

■ 8. Section 8.7 is revised to read as follows:

§8.7 No throttling.

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.

§8.9 [Redesignated as §8.19]

■ 9. Section 8.9 is redesignated as § 8.19.

■ 10. Add new § 8.9 to read as follows:

§8.9 No paid prioritization.

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

(b) "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 forms of preferential traffic management, either;

(1) In exchange for consideration (monetary or otherwise) from a third party, or

(2) To benefit an affiliated entity. (c) The Commission may waive the ban on paid prioritization only if the petitioner demonstrates that the practice would provide some significant public 19848

interest benefit and would not harm the open nature of the Internet.

■ 11. Add new § 8.11 to read as follows:

§8.11 No unreasonable interference or unreasonable disadvantage standard for Internet conduct.

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 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 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.

■ 12. Section 8.13 is amended by revising paragraphs (a)(4), and (b), and by redesignating paragraphs (c) and (d) as paragraphs (d) and (e), and adding new paragraph (c) to read as follows:

§8.13 General pleading requirements. (a) * * *

(4) The original of all pleadings and submissions by any party shall be signed by that party, or by the party's attorney. Complaints must be signed by the complainant. The signing party shall state his or her address, telephone number, email address, and the date on which the document was signed. Copies should be conformed to the original. Each submission must contain a written verification that the signatory has read the submission and, to the best of his or her knowledge, information and belief formed after reasonable inquiry, it is well grounded in fact and is warranted by existing law or a good faith argument for the extension, modification or reversal of existing law; and that it is not interposed for any improper purpose. If any pleading or other submission is signed in violation of this provision, the Commission shall upon motion or upon its own initiative impose appropriate sanctions.

* * * *

(b) Initial Complaint: Fee remittance; Service; Copies to be filed. The complainant shall remit separately the correct fee either by check, wire transfer, or electronically, in accordance with part 1, subpart G (see § 1.1106 of this chapter) and:

(1) Shall file an original copy of the complaint, using the Commission's Electronic Comment Filing System, and, on the same day:

(2) Serve the complaint by hand delivery on either the named defendant or one of the named defendant's registered agents for service of process, if available, on the same date that the complaint is filed with the Commission;

(c) Subsequent Filings: Service; Copies to be filed. (1) All subsequent submissions shall be filed using the Commission's Electronic Comment Filing System. In addition, all submissions shall be served by the filing party on the attorney of record for each party to the proceeding, or, where a party is not represented by an attorney, each party to the proceeding either by hand delivery, overnight delivery, or by email, together with a proof of such service in accordance with the requirements of § 1.47(g) of this chapter.

(2) Service is deemed effective as follows:

(i) Service by hand delivery that is delivered to the office of the recipient by 5:30 p.m., local time of the recipient, on a business day will be deemed served that day. Service by hand delivery that is delivered to the office of the recipient after 5:30 p.m., local time of the recipient, on a business day will be deemed served on the following business day;

(ii) Service by overnight delivery will be deemed served the business day following the day it is accepted for overnight delivery by a reputable overnight delivery service; or

(iii) Service by email that is fully transmitted to the office of the recipient by 5:30 p.m., local time of the recipient, on a business day will be deemed served that day. Service by email that is fully transmitted to the office of the recipient after 5:30 p.m., local time of the recipient, on a business day will be deemed served on the following business day.

(3) Parties shall provide hard copies of all submissions to staff in the Market Disputes Resolution Division of the Enforcement Bureau upon request.

■ 13. Section 8.14 is amended by redesignating paragraphs (g) and (h) as paragraphs (h) and (i) and adding new paragraph (g) to read as follows:

§8.14 General formal complaint procedures.

(g) Request for written opinion from outside technical organization. (1) After reviewing the pleadings, and at any stage of the proceeding thereafter, the Enforcement Bureau may, in its discretion, request a written opinion from an outside technical organization regarding one or more issues in dispute.

(2)(i) Wherever possible, the opinion shall be requested from an outside technical organization whose members do not include any of the parties to the proceeding.

(ii) If no such outside technical organization exists, or if the Enforcement Bureau in its discretion chooses to request an opinion from an organization that includes among its members a party to the proceeding, the Bureau shall instruct the organization that any representative of a party to the proceeding within the organization may not participate in either the organization's consideration of the issue(s) referred or its drafting of the opinion.

(iii) No outside technical organization shall be required to respond to the Bureau's request.

(3)(i) If an opinion from an outside technical organization is requested and the request is accepted, the Enforcement Bureau shall notify the parties to the dispute of the request within ten (10) days and shall provide them copies of the opinion once it is received.

(ii) The outside technical organization shall provide its opinion within thirty (30) days of the Enforcement Bureau's request, unless otherwise specified by the Bureau.

(iii) Parties shall be given the opportunity to file briefs in reply to the opinion.

■ 14. Section 8.16 is revised to read as follows:

§8.16 Confidentiality of proprietary information.

(a) Any materials generated in the course of a proceeding under this part may be designated as proprietary by either party to the proceeding or a third party if the party believes in good faith that the materials fall within an exemption to disclosure contained in the Freedom of Information Act (FOIA), 5 U.S.C. 552(b) (1) through (9). Any party asserting confidentiality for such materials must:

(1) Clearly mark each page, or portion thereof, for which a proprietary designation is claimed. If a proprietary claiming confidentiality shall have the burden of demonstrating, by a preponderance of the evidence, that the materials designated as proprietary fall under the standards for nondisclosure enunciated in the FOIA.

(2) File with the Commission, using the Commission's Electronic Comment Filing System, a public version of the materials that redacts any proprietary information and clearly marks each page of the redacted public version with a header stating "Public Version." The redacted document shall be machinereadable whenever technically possible. Where the document to be filed electronically contains metadata that is confidential or protected from disclosure by a legal privilege (including, for example, the attorneyclient privilege), the filer may remove such metadata from the document before filing it electronically.

(3) File with the Secretary's Office an unredacted hard copy version of the materials that contain the proprietary information and clearly marks each page of the unredacted confidential version with a header stating "Confidential Version." The unredacted version must be filed on the same day as the redacted version.

(4) Serve one hard copy of the filed unredacted materials and one hard copy of the filed redacted materials on the attorney of record for each party to the proceeding, or where a party is not represented by an attorney, each party to the proceeding either by hand delivery, overnight delivery, or email, together with a proof of such service in accordance with the requirements of § 1.47(g) of this chapter and § 8.13(c)(1)(a) through (c).

(b) Except as provided in paragraph (c) of this section, materials marked as proprietary may be disclosed solely to the following persons, only for use in the proceeding, and only to the extent necessary to assist in the prosecution or defense of the case:

(1) Counsel of record representing the parties in the complaint action and any support personnel employed by such attorneys;

(2) Officers or employees of the opposing party who are named by the opposing party as being directly involved in the prosecution or defense of the case;

(3) Consultants or expert witnesses retained by the parties;

(4) The Commission and its staff; and (5) Court reporters and stenographers in accordance with the terms and conditions of this section.

(c) The Commission will entertain, subject to a proper showing under § 0.459 of this chapter, a party's request to further restrict access to proprietary information. Pursuant to § 0.459 of this chapter, the other parties will have an opportunity to respond to such requests. Requests and responses to requests may not be submitted by means of the Commission's Electronic Comment Filing System but instead must be filed under seal with the Office of the Secretary.

(d) The individuals designated in paragraphs (b)(1) through (3) of this section shall not disclose information designated as proprietary to any person who is not authorized under this section to receive such information, and shall not use the information in any activity or function other than the prosecution or defense in the case before the Commission. Each individual who is provided access to the information shall sign a notarized statement affirmatively stating that the individual has personally reviewed the Commission's rules and understands the limitations they impose on the signing party.

(e) No copies of materials marked proprietary may be made except copies to be used by persons designated in paragraphs (b) and (c) of this section. Each party shall maintain a log recording the number of copies made of all proprietary material and the persons to whom the copies have been provided.

(f) Upon termination of a complaint proceeding, including all appeals and petitions, all originals and reproductions of any proprietary materials, along with the log recording persons who received copies of such materials, shall be provided to the producing party. In addition, upon final termination of the proceeding, any notes or other work product derived in whole or in part from the proprietary materials of an opposing or third party shall be destroyed.

■ 16. Section 8.18 is added to read as follows:

§8.18 Advisory opinions.

(a) *Procedures.* (1) Any entity that is subject to the Commission's jurisdiction may request an advisory opinion from the Enforcement Bureau regarding its own proposed conduct that may implicate the open Internet rules or any rules or policies related to the open Internet that may be adopted in the future. Requests for advisory opinions may be filed via the Commission's Web site or with the Office of the Secretary and must be copied to the Chief of the Enforcement Bureau and the Chief of the Investigations and Hearings Division of the Enforcement Bureau.

(2) The Enforcement Bureau may, in its discretion, refuse to consider a request for an advisory opinion. If the Bureau declines to respond to a request, it will inform the requesting party in writing.

(3) Requests for advisory opinions must relate to prospective or proposed conduct that the requesting party intends to pursue. The Enforcement Bureau will not respond to requests for opinions that relate to ongoing or prior conduct, and the Bureau may initiate an enforcement investigation to determine whether such conduct violates the open Internet rules. Additionally, the Bureau will not respond to requests if the same or substantially the same conduct is the subject of a current government investigation or proceeding, including any ongoing litigation or open rulemaking at the Commission.

(4) Requests for advisory opinions must be accompanied by all material information sufficient for Enforcement Bureau staff to make a determination on the proposed conduct for which review is requested. Requesters must certify that factual representations made to the Bureau are truthful and accurate, and that they have not intentionally omitted any information from the request. A request for an advisory opinion that is submitted by a business entity or an organization must be executed by an individual who is authorized to act on behalf of that entity or organization.

(5) Enforcement Bureau staff will have discretion to ask parties requesting opinions, as well as other parties that may have information relevant to the request or that may be impacted by the proposed conduct, for additional information that the staff deems necessary to respond to the request. Such additional information, if furnished orally or during an in-person conference with Bureau staff, shall be promptly confirmed in writing. Parties are not obligated to respond to staff inquiries related to advisory opinions. If a requesting party fails to respond to a staff inquiry, then the Bureau may dismiss that party's request for an advisory opinion. If a party voluntarily responds to a staff inquiry for additional information, then it must do so by a deadline to be specified by Bureau staff. Advisory opinions will expressly state that they rely on the representations made by the requesting party, and that they are premised on the specific facts and representations in the request and any supplemental submissions.

(b) After review of a request submitted hereunder, the Enforcement Bureau will:

(1) Issue an advisory opinion that will state the Bureau's present enforcement intention with respect to the proposed open Internet practices;

(2) Issue a written statement declining to respond to the request; or;

(3) Take such other position or action as it considers appropriate. An advisory opinion states only the enforcement intention of the Enforcement Bureau as of the date of the opinion, and it is not binding on any party. Advisory opinions will be issued without prejudice to the Enforcement Bureau or the Commission to reconsider the questions involved, or to rescind or revoke the opinion. Advisory opinions will not be subject to appeal or further review.

(c) The Enforcement Bureau will have discretion to indicate the Bureau's lack of enforcement intent in an advisory opinion based on the facts. representations, and warranties made by the requesting party. The requesting party may rely on the opinion only to the extent that the request fully and accurately contains all the material facts and representations necessary to issuance of the opinion and the situation conforms to the situation described in the request for opinion. The Bureau will not bring an enforcement action against a requesting party with respect to any action taken in good faith reliance upon an advisory opinion if all of the relevant facts were fully, completely, and accurately presented to the Bureau, and where such action was promptly discontinued upon notification of rescission or revocation of the Commission's or Bureau's approval.

(d) Public disclosure. The Enforcement Bureau will make advisory opinions available to the public on the Commission's Web site. The Bureau will also publish the initial request for guidance and any associated materials. Parties soliciting advisory opinions may request confidential treatment of information submitted in connection with a request for an advisory opinion pursuant to § 0.459 of this chapter.

(e) Withdrawal of request. Any requesting party may withdraw a request for review at any time prior to receipt of notice that the Enforcement Bureau intends to issue an adverse opinion, or the issuance of an opinion. The Enforcement Bureau remains free, however, to submit comments to such requesting party as it deems appropriate. Failure to take action after receipt of documents or information, whether submitted pursuant to this procedure or otherwise, does not in any way limit or stop the Bureau from taking such action at such time thereafter as it deems appropriate. The Bureau reserves the right to retain documents submitted to it under this procedure or otherwise and to use them for all governmental purposes.

PART 20—COMMERCIAL MOBILE SERVICES

■ 17. The authority citation for part 20 continues to read as follows:

Authority: 47 U.S.C. 151, 152, 154(i), 201(b), 225, 301, 303(b), 303(g), 303(r), 316, 403, 615a, 615a-1, 615b, and 47 U.S.C. 615c.
■ 18. Section 20.3 is amended by revising paragraph (b) in the definition of "Commercial mobile radio service", designating in the correct alphabetical order the definition of "Incumbent Wide Area SMR Licensees," revising paragraph (a) in the definition of "Interconnected Service" and revising

the definition of "Public Switched Network" to read as follows:

§20.3 Definitions.

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Commercial mobile radio service.

(b) The functional equivalent of such a mobile service described in paragraph (a) of this section, including a mobile broadband Internet access service as defined in § 8.2 of this chapter.

Interconnected Service. A service: (a) That is interconnected with the public switched network, or interconnected with the public switched network through an interconnected service provider, that gives subscribers the capability to communicate to or receive communication from other users on the public switched network; or

Public Switched Network. The network that includes any common carrier switched network, whether by wire or radio, including local exchange carriers, interexchange carriers, and mobile service providers, that uses the North American Numbering Plan, or public IP addresses, in connection with the provision of switched services.

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