The Net Neutrality Debate: 
Access to Broadband Networks

Updated January 30, 2019
Summary

As congressional policymakers continue to debate telecommunications reform, a major discussion point revolves around what approach should be taken to ensure unfettered access to the internet. The move to place restrictions on the owners of the networks that compose and provide access to the internet, to ensure equal access and nondiscriminatory treatment, is referred to as “net neutrality.” There is no single accepted definition of “net neutrality,” but most agree that any such definition should include the general principles that owners of the networks that compose and provide access to the internet should not control how consumers lawfully use that network, and they should not be able to discriminate against content provider access to that network.

The Federal Communications Commission (FCC) in its February 26, 2015, open meeting voted 3-2, along party lines, to adopt open internet rules and released these rules on March 12, 2015. One of the most controversial aspects of the rules was the decision to reclassify broadband internet access service as telecommunications service under Title II, thereby subjecting internet service providers to a more stringent regulatory framework. With limited exceptions, the rules went into effect June 12, 2015. Various parties challenged the legality of the FCC’s 2015 Open Internet Order, but the U.S. Court of Appeals for the D.C. Circuit, in a June 14, 2016, ruling, voted (2-1) to uphold the legality of all aspects of the 2015 FCC Order. A petition for full U.S. Appeals Court review was denied and a subsequent petition for U.S. Supreme Court review was declined.

The FCC on December 14, 2017, adopted (3-2) an Order that largely reverses the 2015 regulatory framework. The 2017 Order, among other things, reverses the 2015 classification of broadband internet access services as a telecommunications service under Title II of the Communications Act, shifts much of the oversight from the FCC to the Federal Trade Commission and the Department of Justice, and provides for a less regulatory approach. This action has once again opened up the debate over what the appropriate framework is to ensure an open internet. Reaction to the 2017 Order has been mixed. Some see the 2015 FCC rules as regulatory overreach and welcome a more “light-touch” approach, which they feel will stimulate broadband investment, deployment, and innovation. Others support the 2015 regulations and feel that their reversal will result in a concentration of power to the detriment of content, services, and applications providers, as well as consumers, and refute the claim that these regulations have had a negative impact on broadband investment, expansion, or innovation. The 2017 Order was published in the Federal Register on February 22, 2018, and went into effect on June 11, 2018. Federal Register publication triggered timelines for both court challenges and Congressional Review Act (CRA) consideration. Petitions for review have been consolidated in the U.S. Court of Appeals, D.C. Circuit. CRA resolutions (S.J.Res. 52, H.J.Res. 129) to overturn the 2017 Order, were introduced in the 115th Congress. S.J.Res. 52 passed (52-47) the Senate, but H.J.Res. 129 was not considered in the House.

The FCC’s move to adopt the 2017 Order has reopened the debate over whether Congress should consider a measure to amend existing law to provide greater regulatory stability and guidance to the FCC regarding broadband access. Four bills (H.R. 4682, H.R. 6393, S. 2510, and S. 2853) to provide a regulatory framework to outline FCC authority over broadband internet access services were introduced, but not acted on, in the 115th Congress. Debate over what the appropriate regulatory framework should be for broadband access is expected to continue in the 116th Congress.
Contents

Introduction .................................................................................................................. 1
Federal Communications Commission Activity ......................................................... 1

  The Information Services Designation and Title I .................................................. 1
  The 2005 Internet Policy Statement ..................................................................... 2
  The FCC August 2008 Comcast Decision ............................................................. 3
  Comcast v. FCC ...................................................................................................... 3
  The FCC 2010 Open Internet Order ..................................................................... 4
  The 2014 Open Internet Order Court Ruling and the FCC Response ..................... 6
  Verizon Communications Inc. v. Federal Communications Commission .......... 6
  The Federal Communications Commission Response ......................................... 6
  The FCC 2014 Open Internet Notice of Proposed Rulemaking ......................... 7
  The FCC 2015 Open Internet Order .................................................................... 8
  The FCC 2017 Open Internet Notice of Proposed Rulemaking ............................. 10

  WC Docket No. 17-108 (The FCC 2017 Order) .................................................. 11
    The Declaratory Ruling ..................................................................................... 11
    The Report and Order ..................................................................................... 11
    The Order ....................................................................................................... 12
    Implementation of the 2017 Order ................................................................... 12

Network Management ............................................................................................. 13

  Prioritization ....................................................................................................... 13
  Deep Packet Inspection ....................................................................................... 13
  Metered/Usage-Based Billing .............................................................................. 14
  Zero Rating/Sponsored Data Plans ..................................................................... 15

Congressional Activity ............................................................................................ 16

  116th Congress .................................................................................................... 16
  115th Congress .................................................................................................... 16
    Privacy ............................................................................................................. 18
    Transparency ................................................................................................... 18
  114th Congress .................................................................................................... 19
  113th Congress .................................................................................................... 21
  112th Congress .................................................................................................... 22
  111th Congress .................................................................................................... 24

Contacts

Author Information .................................................................................................... 26
Introduction

As congressional policymakers continue to debate telecommunications reform, a major discussion point revolves around what approach should be taken to ensure unfettered access to the internet. The move to place restrictions on the owners of the networks that compose and provide access to the internet, to ensure equal access and nondiscriminatory treatment, is referred to as “net neutrality.” There is no single accepted definition of “net neutrality.” However, most agree that any such definition should include the general principles that owners of the networks that compose and provide access to the internet should not control how consumers lawfully use that network, and they should not be able to discriminate against content provider access to that network.

A major focus in the debate is concern over whether the regulatory framework as delineated in the Federal Communications Commission’s (FCC’s) 2015 Open Internet Order is the appropriate approach to ensure access to the internet for content, services, and applications providers, as well as consumers, or whether a less regulatory approach contained in the 2017 Order is more suitable. The issue of regulation of and access to broadband networks is currently being addressed in three venues:

- at the FCC, where the commissioners on December 14, 2017, adopted (3-2) an Order that went into effect on June 11, 2018, that revokes the 2015 regulatory framework in favor of one that reverses the 2015 classification of broadband internet access services as a telecommunications service under Title II of the Communications Act, provides for a less regulatory approach, and shifts much of the oversight from the FCC to the Federal Trade Commission (FTC) and the Department of Justice (DOJ);
- in the courts, where consolidated petitions for review of the 2017 Order are under consideration in the U.S. Court of Appeals, D.C. Circuit; and a suit filed in the U.S. District Court of the Eastern District of California by the DOJ and various trade groups, challenging the legality of a California internet regulation law, is pending;
- in the 116th Congress, where debate over what the appropriate regulatory framework should be for broadband access is expected to continue.

Whether Congress will take broader action to amend existing law to provide guidance and more stability to FCC authority over broadband access remains to be seen.

Federal Communications Commission Activity

The Information Services Designation and Title I

In 2005 two major actions dramatically changed the regulatory landscape as it applied to broadband services, further fueling the net neutrality debate. In both cases these actions led to the classification of broadband internet access services as Title I information services, thereby subjecting them to a less rigorous regulatory framework than those services classified as telecommunications services. In the first action, the U.S. Supreme Court, in a June 2005 decision (National Cable & Telecommunications Association v. Brand X Internet Services), upheld the Federal Communications Commission’s (FCC’s) 2002 ruling that the provision of cable modem service (i.e., cable television broadband internet) is an interstate information service and is therefore subject to the less stringent regulatory regime under Title I of the Communications Act.
of 1934. In a second action, the FCC, in an August 5, 2005, decision, extended the same regulatory relief to telephone company internet access services (i.e., wireline broadband internet access, or DSL), thereby also defining such services as information services subject to Title I regulation. As a result, neither telephone companies nor cable companies, when providing broadband services, are required to adhere to the more stringent regulatory regime for telecommunications services found under Title II (common carrier) of the 1934 act. However, classification as an information service does not free the service from regulation. The FCC continues to have regulatory authority over information services under its Title I, ancillary jurisdiction. Similarly, classification under Title II does not mean that an entity will be subject to the full range of regulatory requirements, as the FCC is given the authority, under Section 10 of the Communications Act of 1934, to forbear from regulation.

The 2005 Internet Policy Statement

Simultaneous to the issuing of its August 2005 information services classification order, the FCC also adopted a policy statement (internet policy statement) outlining four principles to “encourage broadband deployment and preserve and promote the open and interconnected nature of [the] public Internet.” The four principles are (1) consumers are entitled to access the lawful internet content of their choice; (2) consumers are entitled to run applications and services of their choice (subject to the needs of law enforcement); (3) consumers are entitled to connect their choice of legal devices that do not harm the network; and (4) consumers are entitled to competition among network providers, application and service providers, and content providers. Then-FCC Chairman Martin did not call for their codification. However, he stated that they would be incorporated into the policymaking activities of the commission. For example, one of the agreed-upon conditions for the October 2005 approval of both the Verizon/MCI and the SBC/AT&T mergers was an agreement made by the involved parties to commit, for two years, “to conduct business in a way that comports with the commission’s (2005) Internet policy statement.” In a further action, AT&T included in its concessions to gain FCC approval of its merger to BellSouth an agreement to adhere, for two years, to significant net neutrality requirements. Under terms of the merger agreement, which was approved on December 29, 2006, AT&T not only agreed to uphold, for 30 months, the FCC’s internet policy statement principles, but also committed, for two years (expired December 2008), to stringent requirements to “maintain a neutral network and neutral routing in its wireline broadband Internet access service.”

---

1 47 U.S.C. 151 et seq.
3 For example, Title II regulations impose rigorous antidiscrimination, interconnection and access requirements. For a further discussion of Title I versus Title II regulatory authority see CRS Report R43971, Net Neutrality: Selected Legal Issues Raised by the FCC’s 2015 Open Internet Order.
4 Title I of the 1934 Communications Act gives the FCC such authority if assertion of jurisdiction is “reasonably ancillary to the effective performance of [its] various responsibilities.” The FCC in its order cites consumer protection, network reliability, or national security obligations as examples of cases where such authority would apply (see paragraph 36 of the final rule summarized in the Federal Register cite in footnote 2, above).
6 See http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-261936A1.pdf. It should be noted that applicants offered certain voluntary commitments, of which this was one.
Then-FCC Chairman Genachowski announced, in a September 21, 2009, speech, a proposal to consider the expansion and codification of the 2005 internet policy statement and suggested that this be accomplished through a notice of proposed rulemaking (NPR) process. Shortly thereafter, an NPR on preserving the open internet and broadband industry practices was adopted by the FCC in its October 22, 2009, meeting. (See “The FCC 2010 Open Internet Order,” below.)

The FCC August 2008 Comcast Decision

In perhaps one of its most significant actions relating to its internet policy statement to date, the FCC, on August 1, 2008, ruled that Comcast Corp., a provider of internet access over cable lines, violated the FCC’s policy statement when it selectively blocked peer-to-peer connections in an attempt to manage its traffic. This practice, the FCC concluded, “unduly interfered with Internet users’ rights to access the lawful Internet content and to use the applications of their choice.” Although no monetary penalties were imposed, Comcast was required to stop these practices by the end of 2008. Comcast complied with the order, and developed a new system to manage network congestion. Comcast no longer manages congestion by focusing on specific applications (such as peer-to-peer), nor by focusing on online activities, or protocols, but identifies individual users within congested neighborhoods that are using large amounts of bandwidth in real time and slows them down, by placing them in a lower priority category, for short periods. This new system complies with the FCC internet principles in that it is application agnostic; that is, it does not discriminate against or favor one application over another but manages congestion based on the amount of a user’s real-time bandwidth usage. As a result of an April 6, 2010, court ruling, the FCC’s order was vacated. Comcast, however, stated that it will continue to comply with the internet principles issued in the FCC’s August 2005 internet policy statement. (See “Comcast v. FCC,” below.)

Comcast v. FCC

Despite compliance, however, Comcast filed an appeal in the U.S. Court of Appeals for the District of Columbia, claiming that the FCC did not have the authority to enforce its internet policy statement, therefore making the order invalid. The FCC argued that while it did not have express statutory authority over such practices, it derived such authority based on its ancillary authority contained in Title I of the 1934 Communications Act. The court, in an April 6, 2010, decision, ruled (3-0) that the FCC did not have the authority to regulate an internet service provider’s (in this case Comcast’s) network management practices and vacated the FCC’s order. The court ruled that the exercise of ancillary authority must be linked to statutory authority and that the FCC did not in its arguments prove that connection; it cannot exercise ancillary authority based on policy alone. More specifically, the Court ruled that the FCC “failed to tie its assertion

---


12 Comcast Corporation v. FCC, No. 08-129 (D.C. Cir. September 4, 2008).

of ancillary authority over Comcast’s Internet service to any [‘statutorily mandated responsibility’].” Based on that conclusion the court granted the petition for review and vacated the order.

The impact of this decision on the FCC’s ability to regulate broadband services and implement its broadband policy goals remains unclear. Regardless of the path that is taken, then-FCC Chairman Genachowski stated that the court decision “does not change our broadband policy goals, or the ultimate authority of the FCC to act to achieve those goals.” He further stated that “[T]he court did not question the FCC’s goals; it merely invalidated one, technical, legal mechanism for broadband policy chosen by prior Commissions.” Consistent with this statement, the FCC in a December 21, 2010, action adopted the Open Internet Order to establish rules to maintain network neutrality. (See “The FCC 2010 Open Internet Order,” below.)

The FCC 2010 Open Internet Order

The FCC adopted, on December 21, 2010, an Open Internet Order establishing rules to govern the network management practices of broadband internet access providers. The order, which was passed by a 3-2 vote, intended to maintain network neutrality by establishing three rules covering transparency, no blocking, and no unreasonable discrimination. More specifically

- fixed and mobile broadband internet service providers were required to publicly disclose accurate information regarding network management practices, performance, and commercial terms to consumers as well as content, application, service, and device providers;
- fixed and mobile broadband internet service providers were both subject, to varying degrees, to no blocking requirements. Fixed providers were prohibited from blocking lawful content, applications, services, or nonharmful devices, subject to reasonable network management. Mobile providers were prohibited from blocking consumers from accessing lawful websites, subject to reasonable network management, nor were they allowed to block applications that compete with the provider’s voice or video telephony services, subject to reasonable network management; and
- fixed broadband internet service providers were subject to a “no unreasonable discrimination rule” that states that they shall not unreasonably discriminate in transmitting lawful network traffic over a consumer’s broadband internet access

---

14 Comcast v. FCC decision, issued April 6, 2010, part V, p. 36.
17 The vote fell along party lines with Chairman Genachowski approving, Commissioner Clyburn approving in part and concurring in part, former Commissioner Copps concurring, and Commissioner McDowell and former Commissioner Baker dissenting.
service. Reasonable network management shall not constitute unreasonable discrimination.  

Additional provisions in the order included those which provided for ongoing monitoring of the mobile broadband sector and created an Open Internet Advisory Committee to track and evaluate the effects of the rules and provide recommendations to the FCC regarding open internet policies and practices; while not banning paid prioritization, stated that it was unlikely to satisfy the “no unreasonable discrimination” rule; raised concerns about specialized services and while not “adopting policies specific to such services at this time,” would closely monitor such services; called for review, and possible adjustment, of all rules in the order no later than two years from their effective date; and detailed a formal and informal complaint process. The order, however, did not prohibit tiered or usage-based pricing (see “Metered/Usage-Based Billing,” below). According to the order, the framework “does not prevent broadband providers from asking subscribers who use the network less to pay less, and subscribers who use the network more to pay more” since prohibiting such practices “would force lighter end users of the network to subsidize heavier end users” and “would also foreclose practices that may appropriately align incentives to encourage efficient use of networks.”

The authority to adopt the order abandoned the “third way approach” previously endorsed by then-Chairman Genachowski and other Democratic commissioners, and treated broadband internet access service as an information service under Title I. The order relied on a number of provisions contained in the 1934 Communications Act, as amended, to support FCC authority. According to the order the authority to implement these rules lies in Section 706 of the 1996 Telecommunications Act, which directs the FCC to “encourage the deployment on a reasonable and timely basis” of “advanced telecommunications capability” to all Americans and to take action if it finds that such capability is not being deployed in a reasonable and timely fashion; Title II of the Communications Act and its role in protecting competition and consumers of telecommunications services; Title III, which gives the FCC the authority to license spectrum, subject to terms that serve the public interest, used to provide fixed and mobile wireless services; and Title VI, which gives the FCC the duty to protect competition in video services.

---

19 A network management practice is considered 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.” Cited examples include ensuring network security and integrity; providing parental controls; or reducing or mitigating the effects of congestion on the network.

20 The FCC announced the creation of an Open Internet Advisory Committee April 21, 2011, Federal Register, Vol. 76, No. 77, April 21, 2011, p. 22395. The committee, which includes members from a broad range of industry, academic and community representatives held its first meeting in July 2012. For additional information see http://www.fcc.gov/encyclopedia/open-internet-advisory-committee.

21 In the Matter of Preserving the Open Internet, Broadband Industry Practices, paragraph 72.


The order went into effect November 20, 2011, which was 60 days after its publication in the *Federal Register*. Since the Order’s publication multiple appeals were filed and subsequently consolidated for review in the U.S. Court of Appeals, D.C. Circuit. Verizon Communications was the remaining challenger seeking review, claiming, among issues, that it was a violation of free speech and that the FCC had exceeded its authority in establishing the rules. The court issued its ruling on January 14, 2014, and remanded the decision to the FCC for consideration. (See “The 2014 Open Internet Order Court Ruling and the FCC Response,” below.)

### The 2014 Open Internet Order Court Ruling and the FCC Response

**Verizon Communications Inc. v. Federal Communications Commission**

On January 14, 2014, the U.S. Court of Appeals, D.C. Circuit, issued its ruling on the challenge to the FCC’s Open Internet Order (*Verizon Communications Inc. v. Federal Communications Commission*, D.C. Cir., No. 11-1355). The court upheld the FCC’s authority to regulate broadband internet access providers, and upheld the disclosure requirements of the Open Internet Order, but struck down the specific antiblocking and nondiscrimination rules contained in the Order. (See “The FCC 2010 Open Internet Order,” above.)

Citing the decision by the FCC to classify broadband providers as information service providers (see “The Information Services Designation and Title I”), not common carriers, the court stated that the Communications Act expressly prohibits the FCC from regulating them as such. The court was of the opinion that the Order’s nondiscrimination rules, applied to fixed broadband providers, and antiblocking rules, applied to both fixed and wireless broadband providers, were an impermissible common carrier regulation of an information service and could not be applied.

However, the court upheld the disclosure rules, and more importantly upheld the FCC’s general authority to use Section 706 (advanced communications incentives) of the Telecommunications Act of 1996 (P.L. 104-104) to regulate broadband internet providers. Therefore the court concluded that the FCC does, within limitations, have statutory authority, under Section 706, to establish rules relating to broadband deployment and broadband providers’ treatment of internet traffic. The court remanded the case to the FCC for further action.

### The Federal Communications Commission Response

In response to the court remand, then FCC Chairman Wheeler issued, on February 19, 2014, a statement outlining the steps proposed “to ensure that the Internet remains a platform for innovation, economic growth, and free expression.” Chairman Wheeler proposed that the FCC establish new rules under its Section 706 authority that enforce and enhance the transparency rule.
that was upheld by the court; fulfill the “no blocking” goal; fulfill the goals of the nondiscrimination rule; leave open as an option the possible reclassification of internet access service as telecommunications service subject to Title II authority; forgo judicial review of the appeals court decision; solicit public comment; hold internet service providers to their commitment to honor the safeguards articulated in the 2010 Open Internet Order; and seek opportunities to enhance competition in the internet access market.

In conjunction with this statement the FCC established a new docket (GN Docket No. 14-28) to seek input on how to address the remand of the FCC’s Open Internet rules. This docket was released February 19, 2014, to seek opinion on “what actions the commission should make, consistent with our authority under section 706 and all other available sources of Commission authority, in light of the court’s decision.” However, it should be noted that FCC Commissioners O’Rielly and Pai issued separate statements expressing their disagreement with then-Chairman Wheeler’s proposal to establish new rules to regulate the internet. Despite this opposition, the FCC, on a 3-2 vote, initiated a proceeding to establish rules to address the court’s remand of its 2010 open internet order. (See “The FCC 2014 Open Internet Notice of Proposed Rulemaking,” below.)

The FCC 2014 Open Internet Notice of Proposed Rulemaking

On May 15, 2014, the FCC adopted, by a 3-2 party line vote, a Notice of Proposed Rulemaking (NPRM) seeking public comment on “how best to protect and promote an open Internet.” The NPRM (GN Docket No.14-28) solicited comment on a broad range of issues to help establish a policy framework to ensure that the internet remains an open platform and retains the concepts adopted by the FCC in its 2010 Open Internet Order, of transparency, no blocking, and nondiscrimination.

Following the guidance of the January 2014 D.C. Circuit Appeals Court decision, the NPRM tentatively concluded that the FCC should rely on Section 706 of the 1996 Telecommunications Act for its legal authority. However, the NPRM noted that the FCC “will seriously consider the use of Title II of the Communications Act as the basis for legal authority” and recognizes that Section 706 and Title II are both “viable solutions.” The NPRM also recognized the use of Title III for mobile services and sought comment, in general, on other sources of authority the FCC may utilize. The degree to which the FCC should use forbearance was also discussed.

The NPRM retained the definition and scope contained in the 2010 Open Internet Order which address the actions of broadband internet access service providers, and as defined did not, for example, cover the exchange of traffic between networks (e.g., peering), enterprise services (i.e., services offered to large organizations through individually negotiated offerings), data storage services, or specialized services. However, the NPRM did seek comment on whether the scope of services as defined in the 2010 Open Internet Order should be modified. The question of whether

33 In the Matter of Protecting and Promoting the Open Internet, para. 4.
broadband provider service to edge providers, that is, their function as edge providers’ carriers, should be addressed was also raised. Furthermore, the NPRM sought comment on whether it should revisit its different standard applied to mobile services regarding its no-blocking rule and its exclusion from the unreasonable discrimination rule, and whether technological and marketplaces changes are such that the FCC should consider if rules should be applied to satellite broadband internet access services.

The FCC tentatively concluded that the nonblocking rule established in the 2010 Open Internet Order should be upheld, but that “the revived no-blocking rule should be interpreted as requiring broadband providers to furnish edge providers with a minimum level of access to their end-user subscribers.” However, the NPRM proposed that the conduct of broadband providers permissible under the no-blocking rule be subject to an additional independent screen which required them “to adhere to an enforceable legal standard of commercially reasonable practices.” Furthermore, the NPRM sought comment on whether certain practices, such as “paid prioritization,” should be barred altogether or permitted if they meet the “commercial reasonableness” legal standard.

In addition, the NPRM proposed to enhance the transparency rule, which was upheld by the court; to ensure that consumers and edge providers have the needed information to understand the services received and monitor practices; and to establish a multifaceted dispute resolution process including the creation of an ombudsperson to represent the interests of consumers, start-ups, and small businesses.

President Obama, in a statement released on November 10, 2014, urged the FCC to establish rules that would reclassify consumer broadband service under Title II of the 1934 Communications Act with forbearance. More specifically, the statement called for regulations that prohibit blocking; prohibit throttling; ban paid prioritization; and increase transparency. It was also stated that these rules should also be fully applicable to mobile broadband and if necessary to interconnection points. Monitored exceptions for reasonable network management and specialized services and forbearance from Title II regulations “that are not needed to implement the principles above” were also included in the statement.

While the FCC evaluates all comments, including those of sitting Presidents, as an independent regulatory agency it has the sole responsibility to adopt the final proposal. New rules addressing this issue were adopted by the FCC in February 2015. (See “The FCC 2015 Open Internet Order,” below.)

The FCC 2015 Open Internet Order

The FCC, in its February 26, 2015, open meeting, voted 3-2, along party lines, to adopt new open internet rules (Open Internet Order) and subsequently released these rules on March 12, 2015. The order applies to mobile as well as fixed broadband internet access service and relies on Title II of the Communications Act and Section 706 of the Telecommunications Act of 1996 and, for

34 In the Matter of Protecting and Promoting the Open Internet, para. 97.
35 In the Matter of Protecting and Promoting the Open Internet, para. 116.
36 In the Matter of Protecting and Promoting the Open Internet, para. 138.
37 A full copy of the text of the President’s statement and is available at https://obamawhitehouse.archives.gov/net-neutrality.
mobile broadband, Title III for its legal authority. The order includes among its provisions the following:

- reclassifies “broadband Internet access service” (that is the retail broadband service Americans buy from cable, phone, and wireless providers) as a telecommunications service under Title II;
- bans blocking, throttling, and paid prioritization;
- creates a general conduct standard that internet service providers cannot harm consumers or edge providers (e.g., Google, Netflix) and gives the FCC the authority to address questionable practices on a case-by-case basis (reasonable network management will not be considered a violation of this rule);
- enhances existing transparency rules for both end users and edge providers (a temporary exemption from the transparency enhancements is given for small fixed and mobile providers)\(^\text{39}\) and creates a “safe harbor” process for the format and nature of the required disclosure for consumers;\(^\text{40}\)
- permits an internet service provider to engage in “reasonable network management” (other than paid prioritization) and will take into account the specific network management needs of mobile networks and other technologies such as unlicensed Wi-Fi networks;
- does not apply the open internet rules to “non-BIAS data services,” (aka, specialized services) a category of services defined by the FCC as those that “do not provide access to the Internet generally” (e.g., heart monitors or energy consumption sensors);
- does not apply the open internet rules to interconnection but does gives the FCC authority to hear complaints and take enforcement action, if necessary, on a case-by-case basis, under Sections 201 and 202, regarding interconnection activities of internet service providers if deemed unjust and unreasonable;
- applies major provisions of Title II such as no unjust and unreasonable practices or discrimination, consumer privacy,\(^\text{41}\) disability access, consumer complaint and enforcement processes, and fair access to poles and conduits; and
- forbears, without any further proceedings, from various Title II provisions (e.g., cost accounting rules, tariffs, and last-mile unbundling) resulting in forbearance from 30 statutory provisions and over 700 codified rules.

---

\(^{39}\) The 2015 Open Internet Order granted a temporary exemption from the enhanced transparency requirements for fixed and mobile providers with 100,000 or fewer subscribers. Subsequently, on February 23, 2017, the FCC adopted (2-1) an Order raising the exemption level from 100,000 or fewer subscribers to 250,000 or fewer subscribers and granting the exemption from enhanced transparency requirements for five years. Available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-17-17A1.pdf.

\(^{40}\) The FCC on April 4, 2016, issued a public notice containing proposed formats, i.e., “consumer broadband labels,” to provide consumers with the information needed under the transparency rules. These formats while recommended, are not required by the FCC, but will serve as a “safe harbor” to meet broadband internet service provider transparency requirements under the 2015 Open Internet Order. Available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2016/db0404/DA-16-357A1.pdf.

\(^{41}\) On October 27, 2016, the FCC adopted rules to implement the customer privacy requirements for broadband internet service providers under the 2015 Open Internet Order. In the Matter of Protecting the Privacy of Customers of Broadband and other Telecommunications Services, WC Docket No. 16-106. Available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-16-148A1.pdf. However, these rules were revoked, by congressional action, prior to their complete implementation. (See “115th Congress,” below.)
With limited exceptions, the rules went into effect on June 12, 2015, which was 60 days after their publication in the Federal Register. Various trade groups and selected individual providers filed appeals to the courts challenging the 2015 Open Internet Order’s legality; the appeals were consolidated in the U.S. Court of Appeals for the D.C. Circuit. A motion to stay the effective date of the Order was denied, allowing the rules to go into effect as scheduled on June 12, 2015.

Subsequently, the U.S. Court of Appeals for the D.C. Circuit, in a June 14, 2016, ruling, voted (2-1) to uphold the legality of all aspects the 2015 FCC Order. A petition requesting en banc review of the decision was denied on May 1, 2017, by the majority of the judges. Various parties filed on September 28, 2017, petitions asking the U.S. Supreme Court for review; but the U.S. Supreme Court, on November 5, 2018, denied review.

The FCC 2017 Open Internet Notice of Proposed Rulemaking

On May 18, 2017, the FCC adopted (2-1) a Notice of Proposed Rulemaking (NPR) to reexamine the regulatory framework established in the 2015 Open Internet Order and embrace a “light-touch” regulatory approach. The NPR returns internet broadband access service to a Title I classification and seeks comment on the existing rules governing internet service providers. More specifically, the NPR proposes to

- reinstate the information service classification of broadband internet access service (both fixed and mobile), thereby removing the service from the Title II, common carrier classification imposed by the 2015 Open Internet Order and placing it under Title I;
- reinstate that mobile broadband internet access service is not a commercial mobile service;
- eliminate the general conduct standard;
- seek comment on the need to “keep, modify, or eliminate” the “bright line” (no blocking, no throttling, and no paid prioritization) and transparency rules;

42 Federal Communications Commission, “Protecting and Promoting the Open Internet; Final Rule,” 80 Federal Register, 19738-19850, April 13, 2015.
44 Parties have 60 days after publication in the Federal Register to file suit to challenge the FCC order. (Consolidated under U.S. Telecom Association v. Federal Communications Commission, D.C. Cir., 15-1063, order 4/14/15.)
47 An en banc review calls for a review by the full court of all the active appeals judges in the jurisdiction instead of the previous three-judge quorum. U.S. Telecom Association v. FCC, 825 F.3d 674 (D.C. Cir. 2016), petition for reh’g en banc filed.
The Net Neutrality Debate: Access to Broadband Networks

- return authority to the Federal Trade Commission to oversee and enforce the privacy practices of internet service providers;
- reevaluate the FCC’s enforcement regime with respect to the necessity for ex ante regulatory intervention; and
- conduct a cost-benefit analysis as part of the proceeding.

The NPR comment and reply comment periods closed, and a draft order, largely upholding the NPR and overturning the 2015 Order, was approved (3-2) by the FCC on December 14, 2017. [See “WC Docket No. 17-108 (The FCC 2017 Order),” below.]

**WC Docket No. 17-108 (The FCC 2017 Order)**

The FCC, in its December 14, 2017, open meeting, voted 3-2, along party lines, to adopt a new framework for the provision of broadband internet access services that largely reverses the current 2015 regulatory framework and shifts much of the oversight from the FCC to the Federal Trade Commission (FTC) and the Department of Justice (DOJ). WC Docket No. 17-108 (The 2017 Order) would, among other things, remove broadband internet access services (BIAS) from the 2015 regulatory classification as telecommunications services subject to common carrier Title II classification; remove the “bright line” no blocking, no throttling, and no paid prioritization rules; eliminate the general conduct standard; but expand the public transparency rules.

More specifically, WC Docket No. 17-108 is divided into three parts: a Declaratory Ruling, a Report and Order, and an Order.52

**The Declaratory Ruling**

The Declaratory Ruling includes provisions that restore the classification of BIAS as an information service; reinstate the private mobile service classification of mobile BIAS; and restore broadband consumer protection authority to the FTC.

The Declaratory Ruling also finds that “… Title II regulation reduced Internet service provider (ISP) investment in networks, as well as hampered innovation, particularly among small ISPs serving rural customers”; and “… public policy, in addition to legal analysis, supports the information service classification, because it is more likely to encourage broadband investment and innovation, thereby furthering the closing of the digital divide and benefitting the entire Internet ecosystem.”

**The Report and Order**

The Report and Order includes provisions that enhance transparency requirements by requiring internet service providers to publicly disclose information about their practices including blocking, throttling, and paid prioritization; and eliminates the internet conduct standard.

The Report and Order also finds that “… transparency, combined with market forces as well as antitrust and consumer protection laws, achieve benefits comparable to those of the 2015 ‘bright line’ rules at lower cost.”

---


The Order

The Order finds that adding to the record in this proceeding is not in the public interest.

Reaction to the 2017 Order has been mixed. Some see the 2015 FCC rules as regulatory overreach and welcome a less regulatory approach, which they feel will stimulate broadband investment, deployment, and innovation. Others support the 2015 regulations and feel that their reversal will result in a concentration of power to the detriment of content, services, and applications providers, as well as consumers, and refute the claim that these regulations have had a negative impact on broadband investment, expansion, or innovation.

The 2017 Order, Restoring Internet Freedom, was released by the FCC on January 4, 2018, and published in the Federal Register on February 22, 2018. Publication in the Federal Register triggered timelines for both court challenges and Congressional Review Act consideration. Petitions challenging the legality of the 2017 Order have been consolidated in the U.S. Court of Appeals, D.C. Circuit with oral arguments scheduled for February 1, 2019. CRA resolutions to overturn the 2017 Order were introduced in the 115th Congress. The Senate measure (S.J.Res. 52) passed (52-47) the Senate on May 16, 2018, but the House measure (H.J.Res. 129) was not considered. (See “Congressional Activity,” below.)

Implementation of the 2017 Order

The 2017 Order went into effect on June 11, 2018. As a result the 2015 Order has been revoked and replaced by the provisions contained in the 2017 Order. According to the FCC the 2017 Order framework has three parts:

- The FTC will assume the major role and will take action against internet service providers that undertake anticompetitive acts or unfair and deceptive practices;
- Internet service providers will be subject to enhanced transparency requirements and must publically disclose, via a publically available, easily accessible company website or through the FCC’s website, information regarding their network management practices, performance, and commercial terms of service; and
- Broadband internet access services are reclassified as information services, and regulations imposed by the 2015 Order are vacated, including the classification of broadband internet access services as telecommunications services subject to common carrier Title II classification; the “bright line” no blocking, no throttling, and no paid prioritization rules; and the general conduct standard.

55 Mozilla v. FCC, et al., No. 18-1051 (D.C. Cir. filed February 22, 2018).
Network Management

As consumers expand their use of the internet and new multimedia and voice services become more commonplace, control over network quality and pricing is an issue. The ability of data bits to travel the network in a nondiscriminatory manner (subject to reasonable management practices), as well as the pricing structure established by broadband service providers for consumer access to that data, have become significant issues in the debate.

Prioritization

In the past, internet traffic has been delivered on a “best efforts” basis. The quality of service needed for the delivery of the most popular uses, such as email or surfing the web, is not as dependent on guaranteed quality. However, as internet use expands to include video, online gaming, and voice service, the need for uninterrupted streams of data becomes important. As the demand for such services continues to expand, a debate over the need to prioritize network traffic to ensure the quality of these services has formed.

The need to establish prioritized networks, although embraced by some, has led others to express policy concerns. Concern has been expressed that the ability of network providers to prioritize traffic may give them too much power over the operation of, and access to, the internet. If a multi-tiered internet develops where content providers pay for different service levels, some have expressed concern that the potential to limit competition exists if smaller, less financially secure content providers are unable to afford to pay for a higher level of access. Also, they state, if network providers have control over who is given priority access, the ability to discriminate among who gets such access is also present. If such a scenario were to develop, they claim, any potential benefits to consumers of a prioritized network would be lessened by a decrease in consumer choice and/or increased costs, if the fees charged for premium access are passed on to the consumer.

Others state that prioritization will benefit consumers by ensuring faster delivery and quality of service and may be necessary to ensure the proper functioning of expanded service options. They claim that the marketplace for the provision of such services is expanding and any potential abuse is significantly decreased in a marketplace where multiple, competing broadband providers exist. Under such conditions, they claim that if a network broadband provider blocks access to content or charges unreasonable fees content providers and consumers could obtain their access from other network providers. As consumers and content providers migrate to these competitors, market share and profits of the offending network provider will decrease, they state, leading to corrective action or failure. Furthermore, any abuses that may occur, they state, can be addressed by existing enforcement agencies at the federal and state level.

Deep Packet Inspection

The use of one management tool, deep packet inspection (DPI), illustrates the complexity of the net neutrality debate. DPI refers to a network management technique that enables network operators to inspect, in real time, both the header and the data field of the packets. As a result, DPI not only can allow network operators to identify the origin and destination points of the data packet, but also enables the network operator to determine the application used and content of that packet. The information that DPI provides enables the network operator to differentiate, or

---

58 The header contains the processing information which includes the source and destination addresses, and the data field includes the message content and the identity of the source application.
discriminate, among the packets travelling over its network. The ability to discriminate among packets enables the network operator to treat packets differently. This ability itself is not necessarily viewed in a negative light. Network managers use DPI to assist them in performing various functions that are necessary for network management and that contribute to a positive user experience. For example, DPI technology is used in filters and firewalls to detect and prevent spam, viruses, worms, and malware. DPI is also used to gain information to help plan network capacity and diagnostics, as well as to respond to law enforcement requests. However, some claim that the ability to discriminate based on the information gained via DPI also has the potential to be misused. It is the potential negative impact that DPI use could have on consumers and suppliers that raises concern for some policymakers. For example, concern has been expressed that the information gained could be used to discriminate against a competing service, causing harm to both the competitor and consumer choice by, for example, routing a network operator’s own, or other preferred content, along a faster priority path, or selectively slowing down competitors’ traffic. DPI’s potential to extract personal information about the data that it inspects has also generated concerns, by some, about consumer privacy.

Therefore it is not the management tool itself that is under scrutiny, but the behavior that potentially may occur as a result of the information that DPI provides. How to develop a policy that permits some types of discrimination (i.e., “good” discrimination) that may be beneficial to network operation and improve the user experience while protecting against what would be considered “harmful” or anticompetitive discrimination becomes the crux of the policy debate.

**Metered/Usage-Based Billing**

The move by some network broadband operators toward the use of metered or usage-based billing has caused considerable controversy. Under such a plan, users subscribe to a set monthly bandwidth cap, for an established fee, and are charged additional fees or could be denied service if that usage level is exceeded. The use of such billing practices, on both a trial and permanent basis, is becoming more commonplace.

Reaction to the imposition of usage-based billing has been mixed. Supporters of such billing models state that a small percentage of users consume a disproportionately high percentage of bandwidth and that some form of usage-based pricing may benefit the majority of subscribers, particularly those who are light users. Furthermore, they state that offering a range of service

---


61 For example, concern that information can be gathered, without permission, based on consumer use of the internet to develop user profiles to provide targeted online advertising, also known as “behavioral advertising,” has raised privacy issues. For an examination of this issue see testimony from hearings “Communications Networks and Consumer Privacy: Recent Developments,” held April 23, 2009, by the House Energy and Commerce Subcommittee on Communications, Technology, and the Internet. Available at https://www.gpo.gov/fdsys/pkg/CHRG-111hhrg72880/html/CHRG-111hhrg72880.htm.

62 For example, Time Warner states that the top 25% of its users consume 100 times more bandwidth than the bottom 25% and 30% of its high speed internet service (i.e., Road Runner) customers use less than 1 GB (Gigabyte) per month. See Consumption Based Billing FAQs. Available at http://www.timewarnercable.com/corporate/announcements/
tiers at varying prices offers consumers more choice and control over their usage and subsequent costs. The major growth in bandwidth usage, they also claim, places financial pressure on existing networks for both maintenance and expansion, and establishing a pricing system which charges high bandwidth users is more equitable.

Opponents of such billing plans claim that such practices will stifle innovation in high bandwidth applications and are likely to discourage the experimentation with and adoption of new applications and services. Some concerns have also been expressed that a move to metered/usage-based pricing will help to protect the market share for video services offered in packaged bundles by network broadband service providers, who compete with new applications, and that if such caps must exist, they should be applied to all online video sources. The move to usage-based pricing, they state, will unfairly disadvantage competing online video services and stifle a nascent market, since video applications are more bandwidth-intensive. Opponents have also questioned the accuracy of meters, and specific usage limits and overage fees established in specific trials, stating that the former seem to be “arbitrarily low” and the latter “arbitrarily high.”

Furthermore, they state that since network congestion only occurs in specific locations and is temporary, monthly data caps are not a good measure of congestion causation. Citing the generally falling costs of network equipment and the stability of profit margins, they also question the claims of network broadband operators that increased revenue streams are needed to supply the necessary capital to invest in new infrastructure to meet the growing demand for high bandwidth applications.

**Zero Rating/Sponsored Data Plans**

Zero rating plans refer to the practice by internet service providers of allowing their subscribers to consume specific content or services without incurring charges against the subscriber’s usage limits. In the case of sponsored data a third party (e.g., an interested edge provider) pays the charges that the customer would otherwise incur. Many different variations of these services are being implemented in the marketplace by wireless carriers.

Supporters of such plans claim that they can improve consumer choice and encourage consumers to try new and perhaps usage-heavy services and can improve competition among edge providers. Those critical of such plans state that they can be used for anticompetitive purposes to favor one edge provider over another, particularly those edge providers that are affiliated with the internet service provider, or those that are entrenched and well financed.

Whether or not such activities should, or should not, be considered a violation of the terms of the FCC’s 2015 Open Internet Order’s general conduct rule remains controversial. The FCC, under former Chairman Wheeler, requested in a December 2015 letter that AT&T, T-Mobile, and Comcast individually meet with FCC staff to discuss their various plans to enable the FCC to “have all the facts to understand how this service relates to the Commission’s goal of maintaining

---


65 AT&T’s Sponsored Data and Data Perks Programs, Comcast’s Stream TV service, and T-Mobile’s Binge On program were specifically referred to in the FCC letters. Is should be noted that Comcast states that its Stream TV service is not a zero-rated service since it does not travel across the public internet and is only available to its subscribers at their residence.
a free and open Internet while incentivizing innovation and investment from all sources. A similar letter was sent, at a later date (January 2016), to Verizon inquiring about its FreeBee Data 360 offering. The FCC concluded in a January 11, 2017, Policy Review Report that the specific approaches taken by AT&T and Verizon may harm competition and put forward a draft framework for evaluating such data offering plans. Subsequently, however, the FCC, under current Chairman Pai, issued an Order on February 3, 2017, that retracted the report and closed the inquiries, further stating that the report “will have no legal or other effect or meaning going forward.”

Congressional Activity

116th Congress

Debate over what the appropriate regulatory framework should be for broadband access is expected to continue in the 116th Congress. Whether Congress will choose to address comprehensive legislation to amend the 1934 Communications Act, to provide a framework for such regulation, remains to be seen.

115th Congress

Congressional activity in the 115th Congress sought to address a wide range of issues directly related to the debate over the appropriate framework for the provision of and access to broadband networks. Legislation included Congressional Review Act (CRA) resolutions to overturn the 2017 Order (H.J.Res. 129 and S.J.Res. 52); a measure (S. 993) to nullify the 2015 Order; comprehensive legislation (H.R. 4682, H.R. 6393, S. 2510, and S. 2853) to provide a regulatory framework to outline FCC authority over broadband internet access services; and measures to address the privacy and transparency regulations of the 2015 Order.

Publication of the 2017 Order in the Federal Register on February 22, 2018, triggered timelines for CRA consideration. CRA resolutions to overturn the 2017 Order were introduced on February 27, 2018, in both the House (H.J.Res. 129) by Representative Doyle, and the Senate (S.J.Res. 52) by Senator Markey. Both measures stated that Congress disapproves “the rule” (in this case the FCC 2017 Order) and that the rule “... shall have no force or effect.” If the CRA joint resolution is enacted the rule “shall be treated as though such rule had never taken effect.” Additionally, the agency, in this case the FCC, may not, in most circumstances, promulgate the same rule again. S.J.Res. 52 passed (52-47) the Senate on May 16, 2018, and was sent to the

66 Copies of the three letters which were sent by the FCC on December 16, 2015, are available at http://src.bna.com/bCh; http://src.bna.com/bCj; http://src.bna.com/bCi.


69 Under the Congressional Review Act (CRA; 5 U.S.C. 801–808), when an agency final rule has been published in the Federal Register and submitted to the House and Senate, it begins a 60-day Senate session period during which Congress can consider a joint resolution disapproving that rule under special “fast track” parliamentary procedures which preclude a filibuster of the legislation. For a further discussion of the CRA, see CRS In Focus IF10023, The Congressional Review Act (CRA), by Maeve P. Carey and Christopher M. Davis; and CRS Report R43992, The Congressional Review Act (CRA): Frequently Asked Questions, by Maeve P. Carey and Christopher M. Davis.
House and held at the desk. On May 17, 2018, Representative Doyle filed a discharge petition to bring a House floor vote on H.J.Res. 129 but the House measure did not come up for consideration.

On the other hand, legislation (S. 993) to nullify the FCC’s 2015 Open Internet Order was introduced on May 1, 2017, by Senator Lee. S. 993 nullified the FCC’s 2015 Order, prohibited the FCC from reclassifying broadband internet access service as a telecommunications service, and prohibited the FCC from issuing a substantially similar rule absent congressional authorization. No further action was taken on the measure.

The FCC’s adoption (3-2) of the 2017 Order that largely reversed the 2015 regulatory framework (see “WC Docket No. 17-108 (The FCC 2017 Order)” above) reopened debate over whether Congress should take broader action to amend existing law to provide guidance and more stability to FCC authority. Four measures (H.R. 4682, H.R. 6393, S. 2510, and S. 2853) to provide a regulatory framework to outline FCC authority over broadband internet access services were introduced.

H.R. 4682, introduced on December 19, 2017, by Representative Blackburn, and S. 2510, introduced by Senator Kennedy on March 7, 2018, amended the Communications Act of 1934 to address a broad range of issues. More specifically, provisions contained in both measures included those which prohibited broadband internet access service (BIAS) providers from blocking lawful content or degrading (throttling) lawful internet traffic, subject to reasonable network management; granted FCC enforcement authority and required the FCC to establish formal complaint procedures to address alleged violations; preserved the ability of BIAS providers to offer, with a prohibition on certain practices, specialized services; established BIAS as an information service; and preempted state and local authority over “internet openness obligations” for the provision of BIAS with exceptions for emergency communications or law enforcement, public safety, or national security obligations. Provisions in H.R. 4682 also established eligibility of BIAS services for Federal Universal Service Fund program support. H.R. 4682 and S. 2510 were referred to the House Committee on Energy and Commerce and the Senate Committee on Commerce, Science, and Transportation, respectively, but no further action was taken. S. 2853, introduced on May 16, 2018, by Senator Thune, also amended the Communications Act of 1934 to establish a framework to address broadband internet access services. S. 2853 is similar to H.R. 4682 and S. 2510 in that it classified broadband as an information service, prohibited both blocking and throttling subject to reasonable network management, permitted with limitations the ability to provide specialized services, and provided for a similar role for the FCC. However, unlike the two previous measures, S. 2853 contained provisions that prohibit paid prioritization and contain transparency obligations; did not contain specific provisions to preempt state and local authority; and clarified that Section 706 of the Telecommunications Act of 1996 may not be used as a grant of regulatory authority. S. 2853 was referred to the Senate Committee on Commerce, Science, and Transportation but no further action was taken. H.R. 6393, introduced on July 17, 2018, by Representative Coffman, established a new title, Title VIII, in the 1934 Communications Act to provide a regulatory framework for broadband internet access providers. Provisions included those that banned blocking, throttling, and “paid preferential treatment” subject to reasonable network management, and established a general conduct standard. Included among the additional provisions were those that established transparency requirements, granted the FCC oversight over interconnection, permitted specialized services, stated that internet service providers are eligible to receive funds from, and may be required to contribute to, the Universal Service Fund, ensured disability access to broadband equipment and services, and exempted Title VIII provisions from FCC forebearance authority. H.R. 6393 was referred to the House Committee on Energy and Commerce but no further action was taken.

Privacy

Congress successfully used the Congressional Review Act (CRA; 5 U.S.C. paras. 801-808) to revoke the customer privacy rules adopted by the FCC under the 2015 Open Internet Order. Legislation (S.J.Res. 34, H.J.Res. 86), in the form of a joint resolution, was introduced by Senator Flake and Representative Blackburn, respectively, to overturn the FCC’s customer privacy rules. The identical joint resolutions stated “that Congress disapproves the rule submitted by the Federal Communications Commission relating to ‘Protecting the Privacy of Customers of Broadband and Other Telecommunications Services’ (81 Federal Register 87274 (December 2, 2016) and such rule will have no force or effect.” S.J.Res. 34 passed the Senate (50-48) on March 23, 2017, and the House (215-205) on March 28, 2017, and was signed by the President on April 3, 2017 (P.L. 115-22). This action prevents any new rule subject to the joint resolution from taking effect and invalidates any rules that have already been in effect. Additionally, it prevents the agency (in this case the FCC) from reissuing the rule in “substantially the same form” or issuing a “new rule that is substantially the same” as the disapproved rule unless specifically authorized by a law enacted after the approved resolution (CRA. 5 U.S.C. para 801(b)(2)).

Additional measures (H.R. 1754, H.R. 1868, H.R. 2520, H.R. 3175, S. 878, and S. 964) addressing other aspects of the privacy issue, as it relates to protection of broadband user data privacy, were introduced but received no further action.

Transparency

Legislation (H.R. 288, S. 228) addressing the transparency requirements contained in the 2015 Open Internet Order was under consideration. Transparency requirements refer to the disclosures that internet service providers are required to provide to their end users and edge providers and include, among other things, network management practices, performance, and commercial terms. These requirements were expanded upon or “enhanced” in the 2015 Open Internet Order, and small internet service providers (i.e., those with 100,000 or fewer subscribers) were given a temporary exemption from these enhanced requirements. H.R. 288, introduced on January 4, 2017, by Representative Walden, addresses the transparency requirements contained in the 2015 Order. H.R. 288 expanded the exemption to include internet service providers with 250,000 or fewer subscribers and sunset the transparency exemption five years from the bill’s enactment. The bill also required the FCC to report to Congress 180 days after the bill’s enactment on whether the exemption should be made permanent and whether the definition of “small” for exemption purposes should be modified. H.R. 288 passed the House, by voice vote, on January 10, 2017, but received no further action.

S. 228, introduced on January 24, 2017, by Senator Daines, also addressed the transparency exemption and was largely identical to H.R. 288. S. 228 provided for an exemption of the enhanced transparency rule contained in the 2015 Open Internet Order for small businesses. The term “small business” was defined for purposes of the exemption as any provider of broadband internet access service that has not more than 250,000 subscribers. The bill also required the FCC  

---

to report to Congress 180 days after the bill’s enactment, on whether the exemption should be made permanent and whether the definition of “small business” for exemption purposes should be modified. The exemption was to last for five years after enactment or until the FCC completed the above report and a rulemaking to implement those recommendations. S. 228 was referred to the Senate Commerce, Science, and Transportation Committee, but no further action was taken.

114th Congress

Ten measures (S. 40, S. 2283, S. 2602, S.J.Res. 14, H.R. 196, H.R. 279, H.R. 1212, H.R. 2666, H.R. 4596, and H.J.Res. 42) addressing broadband regulation were introduced in the 114th Congress. Amended versions of H.R. 4596, dealing with transparency, and H.R. 2666, dealing with rate regulation, passed the House on March 16, 2016, and April 15, 2016, respectively. Draft legislation, offered by the House Energy and Commerce Committee and the Senate Committee on Commerce, Science, and Transportation, had also been a focal point of hearings. However, no final action was taken on any of these measures.

S. 40, the Online Competition and Consumer Choice Act of 2015, and its companion measure H.R. 196, introduced on January 7, 2015, by Senator Leahy and Representative Matsui, respectively, addressed the relationship between a broadband internet access provider and a content provider. Both bills directed the FCC to establish/adopt regulations, within 90 days of enactment, to prohibit broadband internet access providers from entering into agreements with content providers, for pay, to give preferential treatment or priority to their content (often termed “paid prioritization”), and prohibited broadband providers from giving preferential treatment to their own or affiliated content. These rules applied to the traffic/content that travels between the access provider and the end user, often termed “the last mile.” Exceptions were given to address the needs of emergency communications or law enforcement, public safety, or national security authorities.

H.R. 279, introduced on January 12, 2015, by Representative Latta, prohibited the FCC from regulating the provision of broadband internet access as a telecommunications service. More specifically, the bill included provisions that classified broadband internet access service as an “information service,” not a telecommunications service, and clarified that a provider of broadband internet access service may not be treated as a telecommunications carrier when engaged in the provision of an information service. This measure prevented the FCC from regulating providers of broadband internet access services under Title II of the Communications Act. Representative Blackburn, in direct response to the FCC’s February 26, 2015, adoption of the Open Internet Order, introduced H.R. 1212, the “Internet Freedom Act,” on March 3, 2015. H.R. 1212 blocked the implementation of the FCC’s adopted Open Internet Order (GN Docket No. 14-28) by stating that it “shall have no force or effect.” Furthermore, it prohibited the FCC from reissuing a rule in substantially the same form or issuing a new rule that is substantially the same, unless the reissued or new rule is specifically authorized by a law enacted after the date of the enactment of this act. Exceptions were granted to protect national security or public safety, or to assist or facilitate actions taken by federal or state law enforcement agencies. Similarly S. 2602, the “Restoring Internet Freedom Act,” introduced by Senator Lee, on February 25, 2016, also negated the FCC’s 2015 Open Internet Order. S. 2602 was identical to H.R. 1212 but did not contain the provisions relating to exceptions.

A more targeted measure, H.R. 2666, the No Rate Regulation of Broadband Internet Access Act, introduced by Representative Kinzinger, on June 4, 2015, prohibited the FCC from regulating the rates charged for broadband internet access as defined by the Open Internet Order. H.R. 2666 was approved (15-11) by the House Communications Subcommittee by a party line vote on February 11, 2016. An amended version of H.R. 2666 was approved (29-19) by the House Energy and
Commerce Committee on March 15, 2016. Prior to full committee passage of H.R. 2666, an amendment stating that the bill would not affect the FCC’s authority over data roaming, interconnection, truth-in-billing, paid prioritization, and rates charged for services that receive universal service support was approved. H.R. 2666 passed the House (241-173) without further amendment, on April 15, 2016.

Another approach, using the Congressional Review Act (CRA; 5 U.S.C. paras. 801-808) to overturn the 2015 Order, was also under consideration. H.J.Res. 42, introduced on April 13, 2015, by Representative Doug Collins, contained a resolution stating that “Congress disapproves the rule submitted by the Federal Communications Commission relating to the matter of protecting and promoting the open Internet ... adopted by the Commission on February 26, 2015 ... and such rule shall have no force or effect.” A similar measure, S.J.Res. 14, introduced on April 28, 2015, by Senator Rand Paul stated that “Congress disapproves the rule submitted by the Federal Communications Commission relating to regulating broadband Internet access ..., and such rule will have no force and effect.” The CRA empowers Congress to review, under an expedited legislative process, new federal regulations and, if a joint resolution is passed and signed into law, to invalidate such regulations.71

Attempts were also made, through the appropriations process, to add language that would have delayed the FCC from using its funds to implement the Open Internet Order until the courts address its legality and/or regulate rates. Language attached to the House Financial Services FY2017 appropriation measure (H.R. 5485) contained among its provisions that prevented the FCC from using any funds “… to implement, administer or enforce” the Open Internet Order until the legal challenges to the Order have been resolved (Title VI §632). The bill also contained a provision that prohibited the FCC from using FY2017 funds to directly or indirectly regulate the prices, fees, or data caps and allowances charged or imposed by providers of broadband internet access services (Title VI §631). The funding bill was passed (30-17) by the House Appropriations Committee on June 9, 2016, and passed the House (239-185) on July 7, 2016.

Separately, legislation (H.R. 4596, S. 2283) addressing the transparency requirements contained in the 2015 Open Internet Order was also under consideration. Transparency requirements refer to the disclosures that internet service providers are required to provide to their end users and edge providers and includes, among other things, network management practices, performance, and commercial terms. These requirements were expanded upon or “enhanced” in the 2015 Open Internet Order, and small internet service providers were given a temporary exemption from these enhanced requirements. H.R. 4596, introduced on February 24, 2016, by Representative Walden, addressed the transparency requirements contained in the 2015 Order. This measure was amended and passed, by voice vote, by the House Energy and Commerce Committee on February 25, 2016, and subsequently passed (411-0) the House on March 16, 2016. H.R. 4596, as passed by the House, sunset the transparency exemption five years from the bill’s enactment and defined small internet service providers as those who have 250,000 subscribers or less. The bill also required the FCC to report to Congress 180 days after the bill’s enactment on whether the exemption should be made permanent and whether the definition of “small” for exemption purposes should be modified. S. 2283, introduced on November 16, 2015, by Senator Daines, also addressed the transparency exemption. An amended version of S. 2283 passed the Senate Commerce Committee, by voice vote, on June 15, 2016. The bill, as amended, provided for an

71 Under the Congressional Review Act (CRA; 5 U.S.C. paras. 801-808) Congress is given 60 in-session days from publication in the Federal Register or submission to Congress, whichever is later, to review and potentially overturn major federal agency rulemakings. For a further discussion of the CRA, see CRS In Focus IF10023, The Congressional Review Act (CRA), by Maeve P. Carey and Christopher M. Davis; and CRS Report R43992, The Congressional Review Act (CRA): Frequently Asked Questions, by Maeve P. Carey and Christopher M. Davis.
exemption of the enhanced transparency rule contained in the 2015 Open Internet Order for small businesses. The term “small business” was defined for purposes of the exemption as any provider of broadband internet access service that has not more than 250,000 subscribers. The bill also required the FCC to report to Congress 180 days after the bill’s enactment on whether the exemption should be made permanent and whether the definition of “small” for exemption purposes should be modified. The exemption would have lasted for three years after enactment or until the FCC completed the above report and a rulemaking to implement those recommendations.

To some degree the debate in the 114th Congress over broadband regulation became more nuanced. Some looked to the FCC to address this issue using current provisions in the 1934 Communications Act to protect the marketplace from potential abuses that could threaten the net neutrality concept. Others felt that existing laws are outdated and limited, cannot be used to establish regulations to address current issues, and would not stand up to court review. They advocated that the FCC should look to Congress for guidance to amend current law to update FCC authority before action is taken. Senator Thune released a list of 11 principles that he felt should be used as a guide to develop legislation. These principles are as follows: prohibit blocking; prohibit throttling; prohibit paid prioritization; require transparency; apply rules to both wireline and wireless; allow for reasonable network management; allow for specialized services; protect consumer choice; classify broadband internet access as an information service under the Communications Act; clarify that Section 706 of the Telecommunications Act may not be used as a grant of regulatory authority; and direct the FCC to enforce and abide by these principles.72

Draft legislation, guided by these principles, was offered by the House Energy and Commerce Committee and the Senate Committee on Commerce, Science, and Transportation.73 The draft amended the Communications Act of 1934 to prohibit blocking lawful content and nonharmful devices (subject to reasonable network management), throttling data (subject to reasonable network management), and paid prioritization; and required transparency of network management practices. The FCC was directed to enforce these provisions through the establishment of a formal complaint procedure. The draft permitted, within certain guidelines, the offering of specialized services. The provision of broadband internet access service (as well as other mass market retail services providing advanced telecommunications capability) was classified as an information service. The draft also prohibited the FCC, or any state commission, from using Section 706 of the Telecommunications Act of 1996 as a grant of authority. This draft legislation was the focus of hearings, held on January 21, 2015, in the Senate Commerce Committee and the House Subcommittee on Communications and Technology.

Additional hearings focusing on a wide range of issues related to the net neutrality/broadband regulation debate were held by the Senate Commerce Committee, the House Judiciary Committee, the House Subcommittee on Communications and Technology, the House Committee on Oversight and Government Reform, and the House Financial Services Subcommittee.

113th Congress

Seven measures (H.R. 3982, H.R. 4070, H.R. 4752, H.R. 4880, H.R. 5429, S. 1981, and S. 2476) were introduced in direct response to the January 2014 decision issued by the U.S. Court of Appeals, D.C. Circuit, which struck down the antiblocking and nondiscrimination rules adopted

---

The Net Neutrality Debate: Access to Broadband Networks

by the FCC in its Open Internet Order (Verizon Communications Inc. v. Federal Communications Commission, D.C. Cir., No.11-1355). H.R. 3982, the Open Internet Preservation Act of 2014, and its companion measure S. 1981, introduced on February 3, 2014, restored the antiblocking and nondiscrimination rules struck down by the court until the FCC takes final action, based on Section 706 authority, upheld by the court, to establish new rules in its current Open Internet proceeding. The FCC was also given the authority to adjudicate cases under those rules that occurred during that period. H.R. 4880, the “Online Competition and Consumer Choice Act of 2014,” and its companion measure S. 2476, introduced on June 17, 2014, directed the FCC to establish regulations that prohibit paid prioritization agreements between internet service providers and content providers on the internet connection between the internet service provider and the consumer and prohibit broadband providers from prioritizing or giving preferential treatment to their own traffic, or the traffic of their affiliates, over the traffic of others. H.R. 5429, the “Open Internet Act of 2014,” introduced on September 9, 2014, restored the authority of the FCC to adopt the rules vacated by the U.S. D.C. Court of Appeals in Verizon v. Federal Communications Commission (the FCC’s 2010 Open Internet Order).

On the other hand, H.R. 4070, the Internet Freedom Act, introduced on February 21, 2014, stated that the FCC’s 2010 Open Internet rules shall have “no force or effect” and prohibited the FCC from reissuing regulations in the same or substantially the same form unless they were specifically authorized by a law enacted after the date of the enactment of the act. Exceptions were made for regulations determined by the FCC to be necessary to prevent damage to U.S. national security; ensure the public safety; or assist or facilitate actions taken by a federal or state law enforcement agency. H.R. 4752, introduced on May 28, 2014, amended the Communications Act of 1934 to prohibit the FCC from reclassifying broadband networks under Title II of the Communications Act. The bill included, among other provisions, that the term “information service” is not a telecommunications service but includes broadband internet access service and that a provider of an information service may not be treated as a telecommunications carrier when engaged in the provision of an information service.

The House Judiciary Committee, Subcommittee on Regulatory Reform, held a hearing on June 20, 2014, examining the role of antitrust law and regulation as it related to the broadband access debate. The Senate Judiciary Committee held a field hearing in Vermont on July 1, 2014, and a hearing on September 17, 2014, to address issues related to an open internet.

112th Congress

A consensus on the net neutrality issue remained elusive and support for the FCC’s Open Internet Order was mixed. (See “The FCC 2010 Open Internet Order,” above.) While some Members of Congress supported the action and in some cases would have supported an even stronger approach, others felt that the FCC had overstepped its authority and that the regulation of the internet is not only unnecessary, but harmful. Internet regulation and the FCC’s authority to implement such regulations was a topic of legislation (H.R. 96, H.R. 166, S. 74, H.R. 2434, H.R. 1, H.R. 3630, H.J.Res. 37, S.J.Res. 6) and hearings (Senate Commerce Committee, House Communications Subcommittee, and House Intellectual Property, Competition, and the Internet Subcommittee) in the 112th Congress.

Legislation to limit FCC regulation was introduced. H.R. 96, the Internet Freedom Act, introduced, on January 5, 2011, by Representative Blackburn and 59 additional original cosponsors, prohibited, with exceptions, the FCC from proposing, promulgating, or issuing any regulations regarding the internet or IP-enabled services, effective the date of the bill’s enactment. Exceptions were made for regulations that the FCC determined were necessary to prevent damage to national security, to ensure the public safety, or to assist or facilitate actions taken by a federal
or state law enforcement agency. The bill also contained a finding that the internet and IP-enabled services are services affecting interstate commerce and are not subject to state or municipality jurisdiction. Another measure, H.R. 166, the “Internet Investment, Innovation, and Competition Preservation Act,” introduced on January 5, 2011, by Representative Stearns, required the FCC to prove the existence of a “market failure” before regulating information services or internet access services. The FCC must also conclude that the “market failure” is causing “specific, identified harm to consumers” and that regulations are necessary to ameliorate that harm. The bill also contained provisions that required any FCC regulation to be the “least restrictive,” determine that the benefits exceed the cost, permit network management, not prohibit managed services, be reviewed every two years, and be subject to sunset. Any such regulation was required to be enforced on a nondiscriminatory basis between and among broadband network, service, application, and content providers. A more narrowly focused limitation was contained within H.R. 3630, the “Middle Class Tax Relief and Job Creation Act of 2011,” as passed (234-193) by the House on December 13, 2011. Section 4105 of Title IV (spectrum provisions) of the bill prohibited the FCC from imposing network access/management requirements on licensees. More specifically, the provision prohibited the promulgation of auction service rules that restrict a licensee’s ability to manage network traffic or prioritize the traffic on its network, or that would require providing network access on a wholesale basis. However, the provision was removed from the bill prior to final passage (P.L. 112-96).

Legislation to strengthen the FCC’s ability to regulate open access by amending Title II of the 1934 Communications Act was also introduced. S. 74, the Internet Freedom, Broadband Promotion, and Consumer Protection Act of 2011, introduced January 25, 2011, by Senator Cantwell, provided for strengthened open access protections. More specifically, the bill contained among its provisions those that codify the four FCC principles issued in 2005 as well as those to require internet service providers to be nondiscriminatory regarding access and transparent in their network management practices. The bill also required internet service providers to provide service to end users upon “reasonable request” and offer stand-alone broadband access at “reasonable rates, terms, and conditions” and prohibited internet service providers from requiring paid prioritization. The bill’s requirements applied to both wireline and wireless platforms; however, the FCC was allowed to take into consideration differences in network technologies when applying requirements. The FCC was tasked with establishing the necessary rules, and injured parties could be awarded damages by the FCC or a federal district court.

Other measures, which proved unsuccessful, were considered to prevent, or at least delay, implementation of the FCC’s Open Internet Order. Attempts were made, through the appropriations process, to add language that would prevent the FCC from using its funds to implement the Open Internet Order. Language attached to the FY2011 appropriation measure, H.R. 1, to prevent the use of FCC FY2011 funds for implementation of the order was passed by the House. The Continuing Appropriations Act, 2011 (H.R. 1), passed (235-189) by the House on February 19, 2011, contained an amendment, introduced by Representative Walden and passed by the House (244-181), to prohibit the FCC from using any funds made available by the act to implement the FCC’s Open Internet Order adopted on December 21, 2010. No such provision, however, was included in the final FY2011 appropriations bill, H.R. 1473, passed by Congress and signed by the President (P.L. 112-10). Similarly, language included in the FY2012 Financial Services and General Government Appropriations bill (H.R. 2434), which includes funding for the FCC, contained a provision that barred the FCC from using any funds to implement its Open Internet Order adopted December 21, 2010. This measure passed the House Appropriations
Committee on June 23, 2011 (H.Rept. 112-136), but no such provision was included in the final FY2012 consolidated appropriations bill, H.R. 2055, which was signed by President Obama (P.L. 112-74) on December 23, 2011.

Another approach, using the Congressional Review Act to overturn the order, was also considered. Identical resolutions of disapproval were introduced, on February 16, 2011, in both the House (H.J.Res. 37) and Senate (S.J.Res. 6). These measures stated that Congress disapproves of the rule submitted by the FCC’s report and order relating to the matter of preserving the open internet and broadband industry practices adopted by the FCC on December 21, 2010, and further stated that “such rule would have no force or effect.” A hearing on H.J.Res. 37 was held by the House Energy and Commerce Communications and Technology Subcommittee on March 9, 2011, and the subcommittee passed the measure (15-8) on a party-line vote immediately following the hearing. On March 25, 2011, the House Energy and Commerce Committee passed (30-23) H.J.Res. 37. On April 8, 2011, the full House considered and passed (240-179) H.J.Res. 37. However, an identical resolution of disapproval (S.J.Res. 6) failed to pass the Senate on November 10, 2011, by a 52-46 vote.

Legislation addressing the issue of data usage caps was also introduced. The Data Cap Integrity Act of 2012 (S. 3703), introduced on December 20, 2012, by Senator Wyden, addressed the usage of data caps by internet service providers (ISPs) and their implementation. Included among the bill’s provisions were those that required that an ISP that imposes data caps must be certified by the FCC as to accuracy of data cap measurement; that the cap “functions to reasonably limit network congestion without unnecessarily restricting Internet use”; and that the cap does not discriminate (that is, for purposes of measuring does not provide “preferential treatment of data that is based on the source or content of the data”). The bill also required ISPs that apply data caps to provide data tools, or identify commercially available data measurement tools, to consumers for monitoring and management. Civil penalties for violations were to be used to reimburse those violated, and unobligated funds in excess of $5 million (annually) were to be transferred from the newly created “Data Cap Integrity Fund” to the U.S. Department of the Treasury for deficit reduction.

111th Congress

Although the 111th Congress saw considerable activity addressing the net neutrality debate, no final action was taken. One stand-alone measure (H.R. 3458) that comprehensively addressed the net neutrality debate was introduced in the 111th Congress. H.R. 3458, the Internet Freedom Preservation Act of 2009, introduced by Representative Edward Markey, and also supported by then-House Energy and Commerce Committee Chairman Waxman, sought to establish a national policy of nondiscrimination and openness with respect to internet access offered to the public. The bill also required the offering of unbundled, or stand-alone, internet access service as well as transparency for the consuming public with respect to speed, nature, and limitations on service offerings and the public disclosure of network management practices. The FCC was tasked with promulgating the rules relating to the enforcement and implementation of the legislation. Then-House Communications, Technology, and the Internet Subcommittee Chairman Boucher stated

74 The Senate Appropriations subcommittee-passed (September 14, 2011) appropriations measure, S. 1573, did contain a provision to prohibit the FCC from using funds to implement the Open Internet Order, but it did not remain in the full committee passed (September 15, 2011) version (S.Rept. 112-79).

75 Under the Congressional Review Act (CRA; 5 U.S.C. paras. 801-808) Congress is given 60 in-session-days, from publication in the Federal Register or submission to Congress, whichever is later, to review and potentially overturn federal agency major rulemakings.
that he continued to work with broadband providers and content providers to seek common
ground on network management practices, and chose to pursue that approach.76 Furthermore, the
Senate Commerce and House Energy and Commerce Committees and Communications
Subcommittees held a series of staff-led sessions with industry stakeholders to discuss a range of
communications policies including broadband regulation and FCC authority.77

Two bills (S. 1836, H.R. 3924) were introduced in response to the adoption by the FCC of a NPR
on preserving the open internet. S. 1836, introduced on October 22, 2009, by Senator McCain,
prohibited, with some exceptions, the FCC from proposing, promulgating, or issuing any further
regulations regarding the internet or IP-enabled services. Exceptions included those relating to
national security, public safety, federal or state law enforcement, and Universal Service Fund
solvency.78 Additional provisions reaffirmed that existing regulations, including those relating to
CALEA, remain in force and stated as a general principle that the internet and all IP-enabled
services are services affecting interstate commerce and are not subject to state or municipal
locality jurisdiction. H.R. 3924, introduced by Representative Blackburn on October 26, 2009,
was identical to S. 1836, except for title and the omission of the reference to the Universal
Service Fund. H.Con.Res. 311, introduced by Representative Gene Green and 49 other House
Members on July 30, 2010, affirmed that it is the responsibility of Congress to determine the
regulatory authority of the FCC with respect to broadband internet services and called upon the
FCC to suspend any further action on its proceedings until such time as Congress delegates such
authority to the FCC.

Another measure (H.R. 5257), introduced by Representative Stearns, addressed the possible
reclassification of broadband service and would have required, among other provisions, that the
FCC prove the existence of a “market failure” before regulating information services or internet
access services. Furthermore, the bill required, among other provisions, that the FCC conclude
that the market failure is causing “specific, identified harm to consumers” and if devising
regulations must adopt those that are the “least restrictive,” permit network management, and are
subject to sunset. Still another measure (S. 3624), introduced by Senator DeMint, contained
provisions that required the FCC to prove consumers are being substantially harmed by a lack of
marketplace choice before imposing new regulations and to weigh the potential cost of action
against any benefits to consumers or competition. The FCC was given the authority to hear
complaints for violations and award damages to injured parties. The bill also required that any
rules the FCC adopted would sunset in five years unless it could make the same finding again.

The net neutrality issue was also narrowly addressed within the context of the American
require the National Telecommunications and Information Administration (NTIA), in consultation
with the FCC, to establish “nondiscrimination and network interconnection obligations” as a
requirement for grant participants in the Broadband Technology Opportunities Program (BTOP).
The law further directs that the FCC’s four broadband policy principles, issued in August 2005,

77 Bicameral Bipartisan Telecommunications Update Statement, U.S. Senate Committee on Commerce, Science and
78 For a discussion and analysis of issues regarding the Universal Service Fund see CRS Report RL33979, Universal
Service Fund: Background and Options for Reform, by Angele A. Gilroy.
The Net Neutrality Debate: Access to Broadband Networks

are the minimum obligations to be imposed.\textsuperscript{79} These obligations were issued July 1, 2009, in conjunction with the release of the notice of funds availability (NOFA) soliciting applications for the program. The FCC’s National Broadband Plan (NBP), which was required to be written in compliance with provisions contained in the ARRA, while making no recommendations, did contain discussions regarding the open internet and the classification of information services.

Concern over the move by some broadband network providers to expand their implementation of metered or consumption-based billing prompted the introduction of legislation (H.R. 2902) to provide for oversight of volume usage service plans. H.R. 2902, the Broadband Internet Fairness Act, introduced by former Representative Massa, required, among its provisions, that any broadband internet service provider serving 2 million or more subscribers submit any volume usage based service plan that the provider is proposing or offering to the Federal Trade Commission (FTC) for approval. The FTC, in consultation with the FCC, was required to review such plans “to ensure that such plans are fairly based on cost.” Such plans were subject to agency review and public hearings. Plans determined by the FTC to impose “rates, terms, and conditions that are unjust, unreasonable, or unreasonably discriminatory” were to be declared unlawful. Violators were subject to injunctive relief requiring the suspension, termination, or revision of such plans and were subject to a fine of not more than $1 million.

Author Information

Angele A. Gilroy
Specialist in Telecommunications Policy

Disclaimer

This document was prepared by the Congressional Research Service (CRS). CRS serves as nonpartisan shared staff to congressional committees and Members of Congress. It operates solely at the behest of and under the direction of Congress. Information in a CRS Report should not be relied upon for purposes other than public understanding of information that has been provided by CRS to Members of Congress in connection with CRS’s institutional role. CRS Reports, as a work of the United States Government, are not subject to copyright protection in the United States. Any CRS Report may be reproduced and distributed in its entirety without permission from CRS. However, as a CRS Report may include copyrighted images or material from a third party, you may need to obtain the permission of the copyright holder if you wish to copy or otherwise use copyrighted material.

\textsuperscript{79} For a further more detailed discussion of the broadband infrastructure programs contained in P.L. 111-5 see CRS Report R40436, Broadband Infrastructure Programs in the American Recovery and Reinvestment Act, by Lennard G. Kruger.