The debate over net neutrality has been contentious since the early days of the Internet. It has repeatedly been challenged in court by Internet service providers (ISPs) for years, culminating in the latest decision by the Federal Communications Commission (FCC) to upend the 2015 net neutrality ruling. Critics see this decision as a threat to Internet consumer freedoms, economic competition (imposing a significant market disadvantage on small businesses), and even the progress of scientific research and knowledge discovery. Seeing how important the Internet is to the advancement of innovation, development of human capital, and economic growth, it is imperative for technologists, researchers, and innovators to take heed of the policy debate and the latest developments.

On 18 May, 2017, the FCC voted to put forth the Restoring Internet Freedom Notice of Proposed Rulemaking (NPRM), seeking comments on a proposal to roll back the 2015 net neutrality regulations. In 2015, the Obama administration passed a rule to classify the Internet as a public utility under Title II of the 1934 Communications Act. The rule prohibits ISPs from preferentially allocating bandwidth for affiliated content, throttling bandwidth, or implementing preferential price structures for their customers. Several months later, on December 14, the FCC moved forward with their decision to repeal the rule after a 3–2 party-line vote.¹

**POLICY BACKGROUND**

The US Constitution, through the speech and press clause of the First Amendment, established a foundational tenet that was unequivocally fundamental to its progress as a nation. The amendment—which reads, "Congress shall make no law abridging the freedom of speech, or of the press"—codified the freedom of expression as an essential

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**Net Neutrality: A Brief Overview of the Policy and the FCC’s Ruling to Upend It**

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In this first installment of Computer’s new column, the author gives an overview of the net neutrality policy and the FCC’s recent rulings that threaten it.
liberty guaranteed by US law. Interestingly, the amendment, which was conceived by James Madison and introduced in the House of Representatives in 1789, was originally worded as follows: “The people shall not be deprived or abridged of their right to speak, to write, or to publish their sentiments; and the freedom of the press, as one of the great bulwarks of liberty, shall be inviolable” [http://constitution.findlaw.com/amendment1/annotation06.html).

While James Madison and the rest of the Founding Fathers in their day would have never conceived of a system that remotely resembles the Internet, one could argue that the Internet has fulfilled their vision. It became the quintessence of the First Amendment as perhaps the most perfect embodiment of a democratic system. The independence of the Internet from any exclusive use by state actors, private interests, or a single political entity for their sole benefit has been pivotal in advancing humanity, our quest for knowledge, and human welfare.

Far beyond what Madison envisioned, the Internet has ushered in continuous waves of radical technological advances, scientific breakthroughs, and forces of novel and disruptive innovations that bolstered the economic growth and prosperity of all nations across the globe. From 2006 to 2011, the Internet accounted for 21 percent of total GDP growth of mature economies. The Internet Association estimated that the Internet sector was responsible for close to $966.2 billion or 6 percent of the US real GDP in 2014, surpassing several other established sectors. The Internet user penetration rate is at 92 percent in the US—the Internet is almost ubiquitous, and it still has unbounded potential to drive more economic growth and reimagine the landscape of technology, tools, and business models.

This progress has been enabled by the Internet functioning as an equitable platform promoting a free space for innovation, scientific research, economic competition, and free expression. Net neutrality became a standard to enshrine these principles and uphold the open architecture of the Internet. In this sense, net neutrality aimed to make the Internet a public good.

However, the Internet is not strictly a public good (like free-to-air television programming, radio transmission, or national defense) because it is not maintained by the government but by ISPs. This means the Internet is not maintained by the government but by ISPs. This means the Internet is not an economic competition, market actors’ decisions instead of price takers? Price takers in a perfectly competitive free market are constrained by the broader supply and demand requirements of the market; they can’t raise the price of broadband access without reasonably expecting to lose customers in the process to their competitors. By contrast, in a perfect monopoly, due to lack of competition, market actors’ decisions dictate market prices as they are not bound by supply and demand. Monopolistic ISPs can restrict output by blocking or throttling content, downgrading the quality of their product, offer paid prioritization, apply data caps and zero ratings, and prohibitively raise exception. A critical question presents itself, then. Considering the monumental importance of the Internet, should there be any restrictions or regulations preventing ISPs from transforming the Internet into a monopoly, a market where ISPs can be price makers instead of price takers? Price makers in a perfectly competitive free market are constrained by the broader supply and demand requirements of the market; they can’t raise the price of broadband access without reasonably expecting to lose customers in the process to their competitors. By contrast, in a perfect monopoly, due to lack of competition, market actors’ decisions dictate market prices as they are not bound by supply and demand. Monopolistic ISPs can restrict output by blocking or throttling content, downgrading the quality of their product, offer paid prioritization, apply data caps and zero ratings, and prohibitively raise exception. A critical question presents itself, then. 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purview—among other things—is to broaden the implementation of and encourage investments and innovation in broadband technologies, in addition to ensuring that similar regulatory treatment is applied for all competing broadband providers (www.fcc.gov/general/national-broadband-plan).

The point of contention in this decade-long debate is how ISPs are regulated under the law: as a telecommunications service (under Title I) or as an information service (under Title II). Title II explicitly gives the FCC the authority to protect consumers and online businesses against “unjust or unreasonable discrimination” by ISPs. Title I does not. And in the absence of a Congressional act, it is left up to the FCC to make a decision.

The Federal Communications Commission (FCC) has approved the Open Internet Order of 2010, setting the following specific rules:

- **Transparency.** Fixed and mobile broadband providers must disclose the network management practices, performance characteristics, and terms and conditions of their broadband services.
- **No blocking.** Fixed broadband providers may not block lawful content, applications, services, or nonharmful devices; mobile broadband providers may not block lawful websites, or block applications that compete with their voice or video telephony services.
- **No unreasonable discrimination.** Fixed broadband providers may not unreasonably discriminate in transmitting lawful network traffic.

The Open Internet Order was strongly challenged in court (Comcast Corp. v. FCC, 600 F.3d 642 [DC Cir. 2010] and Verizon v. FCC, 740 F.3d 623 [DC Cir. 2014]). The Court of Appeals of the DC Circuit ruled in both cases against the FCC and vacated the “no blocking” and “no unreasonable discrimination” rules from the order, arguing that these rules only apply to common carriers.

Instead of appealing the court ruling on the Open Internet Order, the FCC passed the net neutrality rule of 2015, directly classifying the Internet as a telecommunications service, not as an information service. Therefore, the Internet can be considered a public good and ISPs can be regarded under the law as common carriers that grant access to broadband service to consumers under Title II of the Communications Act of 1934.

In USTA v. FCC (DC Cir. 2016), the court eventually ruled in favor of treating the Internet as a utility, not a luxury, and it upheld the FCC’s classification of broadband providers as common carriers—thus, the net neutrality rule prevailed.

Fast forward to 2017, under a new administration. On 18 May, the FCC put forward a NPRM intended to repeal the net neutrality rule and return to light-touch Internet regulations. And on December 14, the FCC voted in favor of ISPs to repeal the net neutrality policy.

### Current Development

In response to the FCC repeal of the net neutrality ruling, Senate minority leader Chuck Schumer (D-NY) stated he would force a vote to undo the FCC’s decision with a Congressional resolution of disapproval. Congress can overturn agency actions by invoking the Congressional Review Act (CRA). The FCC repeal takes effect 60 days after publication of the rule in the Federal Register, which in this case was published on 22 February, 2018. Fifty Democratic senators pledged to vote for the resolution, which only needs a simple majority to pass (51 votes) to undo the FCC regulation. But even if
the CRA passes both chambers (which is unlikely in the House), President Trump can veto it.

A coalition of 22 states and the District of Columbia are suing the FCC for preempting states from imposing their own net neutrality rules and ad-ducting the bulk of fake comments submitted in response to the FCC’s NPRM as a corrupting record on the FCC’s net neutrality rulemaking process. The US Government Accountability Office (GAO) will investigate the possibility of fraud and identity theft during the FCC’s process.

The Pew Research Center had previously estimated that close to 57 percent of the 21.7 million public comments submitted to the FCC appeared to include fraudulent information and fake names, with only 6 percent of submitted comments being unique. The rest had been sent thousands of times, including comments that appear to have originated from Russia.10

On the US House side, Representative Marsha Blackburn (R-TN) introduced HR 4682, the Open Internet Preservation Act (www.congress.gov/bill/115th-congress/house-bill/4682), in response to the FCC decision. The bill “amends the Communications Act of 1934 to ensure Internet openness, to prohibit blocking of lawful content, applications, services, and non-harmful devices, to prohibit impairment or degradation of lawful Internet traffic, to limit the authority of the Federal Communications Commission and to preempt State law with respect to Internet openness obligations, to provide that broadband Internet access service shall be considered an information service, and for other purposes.”

The Open Internet Preservation Act has been widely criticized by Amazon, Google, Microsoft, and public interest groups for defining broadband as an information service because it would mean it couldn’t be regulated more strictly as a Title II service, as it was under the repealed Open Internet Order. The bill would allow ISPs to offer paid access and content prioritizations, and would curb states’ rights in making their own determination on this policy. The bill does exactly what the FCC intended in repealing the Obama-era regulation.11

Representative Sean Patrick Maloney (D-NY) introduced another bill, HR 4585 (the Save Net Neutrality Act of 2017; www.congress.gov/bill/115th-congress/house-bill/4585), “to prohibit the Federal Communications Commission from relying on the Notice of Proposed Rulemaking in the matter of restoring Internet freedom that was adopted by the Commission on May 18, 2017, to adopt, amend, revoke, or otherwise modify any rule of the Commission.”

The net neutrality debate is far from settled, and it remains to be seen whether the Congressional resolution of disapproval will secure the remaining vote in the Senate before 23 April, when the FCC’s Restoring Internet Freedom will take effect. Similarly, we will find out if any of the 22 states’ court cases and the GAO’s investigation will reveal any information about the FCC NPRM process.12

REFERENCES