

Executive Summary

The Save the Internet Act of 2019¹ is a federal bill that would restore Obama-era network neutrality rules (or simply net neutrality). The legislation was proposed by Representative Michael Doyle, a Democrat from Pennsylvania. There was much public push-back after the Obama-era net neutrality rules were removed on December 14, 2017, by the Federal Communications Commission (FCC). Over 86% of Americans did not support the FCC's decision². When the commission's decision to overturn net neutrality was first being considered over 100 powerful technology companies including Google, Amazon, Github, and Facebook sent a letter to the FCC detailing their support for net neutrality, stating that removing net neutrality will weaken free speech and innovation on the internet³. In response to the vast majority of American' desire for net neutrality, Representative Doyle pushed for the creation of the Save the Internet Act of 2019. Currently, the Save the Internet Act of 2019 has passed the House of Representatives and is waiting for approval in the Senate. It is dubious as to whether the act will pass through the Senate because many Republican representatives are against net neutrality⁴.

Legislation Overview

Net neutrality has been around in the federal government since the early 2000s, but it has effectively existed since 2010 when the FCC passed the Open Internet Order, executive

1 Doyle, Michael F. "H.R.1644 - 116th Congress (2019-2020): Save the Internet Act of 2019.", 2019.

2 Brodtkin, Jon. "Democrats' Net Neutrality Bill Would Fully Restore Obama Era Fcc Rules.", 2019.

3 Roppolo, Michael. "100 Tech Companies Send Letter to FCC, Say Innovation Demands Net Neutrality.", 2014.

4 Brodtkin, Jon. "House Democrats Refuse to Weaken Net Neutrality Bill ...", 2019.

regulations that originally established net neutrality⁵. The existence of net neutrality forces internet service providers (ISPs) to treat all internet traffic they carry on their networks equally¹. Internet service providers are prevented from slowing different internet-based communications that are carried on their networks. Without net neutrality ISPs can interfere with a user's internet connections, slowing your upload and download speeds, especially with regards to certain content⁶. Without net neutrality internet service providers do not need to treat all internet traffic that they carry equally. If for example, an ISP saw one of their users connecting to a competitor's website, then the ISP could slow down the speed of the user's internet traffic, making their competitor's website appear very slow and almost impossible to feasibly use. Like traditional consumers of ISP services, the servers that host websites and other web-services also connect to the internet through internet service providers. Websites and the companies that manage the websites are also threatened by internet service providers being able to slow down the connections of their servers. Without net neutrality, companies can and have been forced to pay the internet service providers extra money just to have the same normal internet speeds of their competitors⁵. If Save the Internet Act of 2019 passes and becomes law, internet service providers will once again be prohibited from slowing down internet connections. If a consumer detected that their internet connection was being tampered with by their ISP, or was threatened that their connection could be slowed, they would be able to take legal action against their ISP.

Analysis for Impact to Consumer/Citizen

5 Kastrenakes, Jacob. "A Timeline of Netflix's Conflicting Stances on Net Neutrality.", 2017.

6 Hoofnagle, "Chris Jay. Federal Trade Commission Privacy Law and Policy", 2016.

For the citizens of the United States, the Save the Internet Act of 2019 would be immensely beneficial. Almost every citizen in the country uses the internet (90% of Americans⁷), the benefits they receive from net neutrality would still carry over to the rest of the country through a stronger economy and other societal benefits. The existence of net neutrality would prevent internet service providers from severely hindering whatever internet-based communications that they do not like. The protections that such a power would give to businesses of all kinds would be fundamental³. Internet service providers would not be able to tamper with their competitors' abilities to efficiently communicate over the internet. ISPs would also not be able to bully other companies into giving them extra money just to have fair, competitive internet speeds nor would internet service providers be able to give other companies very special deals with faster speeds. In 2014 Netflix was rapidly growing as a digital movie streaming service but net neutrality was not effectively protecting Netflix and it was unfairly extorted by its ISP⁵. One of the internet service providers that Netflix relied on, Comcast, saw an opportunity to extort Netflix and force the company to pay Comcast special, expensive interconnecting fees. Comcast intentionally set up their networks so Netflix's internet connection would be slowed if the streaming service did not pay Comcast enough money for the ISP's new construction project. At the same time, Comcast was giving its own TV streaming service an unfair advantage while streaming through Xboxes. Comcast was refusing to apply internet data caps to its own TV service, unfairly giving consumers a better experience with their service, while worsening consumers' experiences of other streaming services⁹. The re-institution of net

⁷ Anderson, Monica, Andrew Perrin, Jingjing Jiang, and Madhumitha Kumar. "10% of Americans Dont Use the Internet. Who Are They?", 2019.

neutrality would protect companies from facing such threats because according to the rules of net neutrality internet service providers have to treat all internet traffic equally. In the example of streaming services, Comcast would not be able to give itself special benefits and it could also not extort other streaming services such as Netflix into giving them more money. To be clear, movie streaming services are not the only companies that have been threatened by the removal of net neutrality⁸. Internet service providers can unfairly benefit or extort any business that relies on internet communications. While the FCC was considering overturning net neutrality ISPs promised that they would not intentionally extort any company, however as the United States no longer enforces net neutrality there is no way to guarantee their cooperation⁹. Companies would receive many fair protections from the re-instantiation of net neutrality, strengthening the entire economy.

Individual consumers would also see benefits in the form of strong protections from internet service providers tampering with and hindering their connections. Many net neutrality advocates are worried that ISPs, who already act as the gateway for citizens to connect to the internet, will restrict what content can be reasonably viewed or accessed by consumers¹⁰. For example, ISPs could issue certain data plans to all of their consumers that dictate how much of the internet a consumer can access. Even though internet service providers are only responsible for connecting consumers to the internet and have absolutely nothing to do with the content on

8 Trendacosta, Katharine. "Victory! The House of Representatives Passes Net Neutrality Protections.", 2019.

9 Arbel, Tali. "House Passes Bill to Restore Net Neutrality Rules." Fox Business. April 10, 2019. Accessed April 30, 2019.

10 Foundation, Fight for the Future. "Force the Senate to Vote on Net Neutrality.", 2019.

the internet some activists have theorized that internet service providers could block certain types of content. In the worst-case scenario, ISPs could charge large amounts of extra money for consumers to be able to access gaming servers, internet video sites, or even just to access social media sites at a viable speed¹¹. Regardless of the different forms that internet service providers could institute paid prioritization, the re-institution of net neutrality would protect citizens and online companies.

The existence of net neutrality also benefits citizens by granting them unhindered freedom of speech online. Not only would certain organizations that ISPs do not like, be protected from having their content blocked but with net neutrality individual citizens can also say whatever they want and use services such as proxies with impunity¹¹. Proxies, frequently used in the form of a virtual private network (VPN) or The Onion Router (TOR), allow an individual to mask their internet usage. When a person uses the internet they send information in the form of packets to the server that the website they are accessing is being hosted on. Anyone between the user and the server, including the ISP, can read these packets. An internet user that uses proxies is protected in many ways from being tracked, having their information compromised, or being hacked via a man-in-the-middle attack¹¹. Internet service providers frequently collect the information in the packets that a user sends and receives, recording what website the user is connecting to and sometimes what they are doing on that website¹⁴. Internet service providers sell this information, use it to learn more about their consumers, and use the information to know how as well as when they can interfere with a user's traffic¹³. By using

11 Coleman, G. "The Tor Project | Privacy & Freedom Online." Torproject.org. January 1, 2019. Accessed April 30, 2019.

VPNs or TOR as well as other forms of proxies, consumers are able to circumvent the surveillance of internet service providers. Instead of being able to see who an individual is communicating with and what they are doing on that website, ISPs only see an anonymous proxy server and unreadable encrypted information. Because internet service providers cannot collect the information their consumers are sending while they are hiding behind a proxy, internet service providers have been known to slow the traffic of proxies to the point where they can no longer feasibly be used⁸. Some activists fear that without net neutrality, internet service providers may even be able to abuse their position further through advertising¹². Theoretically, ISPs could be paid by advertising companies to insert even more advertisements onto the web pages that their consumers are visiting. The re-instantiation of net neutrality would protect the online freedoms of individual citizens.

Analysis for Business/Governmental Impact

Internet service providers themselves would also be affected by the re-institution of net neutrality. As internet service providers were still successful businesses while net neutrality was in effect¹², it is safe to conclude that they will not face serious problems from not being able to apply the unfair business practices previously described. With the existence of net neutrality internet service providers, particularly smaller ISPs may still face financial problems. While expanding their coverage it is easier for internet service providers to offer different internet speeds or temporarily slow parts of their network¹³. Internet service providers will have to deal

12 King, Hope. "U.S. Internet Speeds Just Hit a Milestone - Money.cnn.com.", 2016.

13 Kastrenakes, Jacob. "The FCC Says Net Neutrality Destroys Small ISPs. So Has It?", 2017.

with the consequences of offering the same internet speeds to all data that they carry during their construction projects and while they are innovating. It has been cited in opposition to the Save the Internet Act of 2019, that “in 2018 [the year after net neutrality had been repealed], consumers have benefited from greater than 35 percent increase in average, fixed broadband download speeds, and the United States rose to sixth, from thirteenth, in the world for those speeds”¹⁴. It should be noted that large yearly increases in average download speeds are not rare. Between 2015 and 2016 (a time when net neutrality was strongest) average download speeds increased by 42 percent while upload speeds increased by 51 percent¹⁶. There are also concerns that net neutrality would unfairly benefit large ISPs over small businesses and startup ISPs. FCC chairman Ajit Pai claims that small businesses will have a more difficult time expanding because of the legal complexities of net neutrality that large businesses, with more lawyers, are more capable of dealing with¹⁸. Several small internet service providers that were interviewed by The Verge disagreed, saying that net neutrality was simple to follow. “Mark Jen, the chief technical officer of a small internet service provider in California... ‘while net neutrality sounds like rules and regulations, it’s actually just saying everybody has to run stuff in the default mode, which is as fast as possible’”, The Verge reported in their article on net neutrality and small businesses¹⁸. The main concern of the small business internet service providers interviewed by The Verge was that “they’re concerned about being forced to spend tens of thousands of dollars proving to the FCC that they’re actually following the rules”. According to the article, when the small

14 Office of Management and Budget, Executive Office of the President. "Statement of Administration Policy, H.R. 1644 - Save the Internet Act of 2019." Whitehouse.gov. April 8, 2019. Accessed April 30, 2019.

businesses were asked about whether they support net neutrality, “the answers were mixed”.

Overall, large business ISPs would not be negatively affected by the re-instantiation of net neutrality through the passing of the Save the Internet Act of 2019 and small business ISPs would still face some extra challenges.

Critique/Recommendations for Improvements to Legislation

The Save the Internet Act of 2019 could be improved by being less harmful and possibly even helpful to small businesses. Net neutrality is necessary because the free market of all the internet service providers does not move fast enough for competition to take hold. Larger internet service providers already have cables that spread across the country, unlike small business ISPs that face many challenges with expansion¹⁵. Because the market does not move quickly and most consumers only have one or maybe two internet service providers available to them, there is not enough competition in the industry. ISPs are able to get away with horribly unfair practices such as extorting businesses because there is frequently no competing ISP for the business to switch to¹⁵. In order to keep the internet service provider industry and market as fresh and healthy as possible small businesses should be supported. The Save the Internet Act of 2019 could help to support small businesses by not forcing ISPs to prove that they are not interfering with their traffic, as detailed in the previous section¹⁴. Citizens or internet-based organizations can and are monitoring internet service providers, documenting any changes to their traffic. Citizens can simply use simple smartphone applications such as OONI Probe¹⁶ to run several

¹⁵ Trendacosta, "Real Net Neutrality Is More Than a Ban on Blocking, Throttling, and Paid Prioritization.", 2019

¹⁶ Xynou, Maria, Arturo Filasto, and Leonid Evdokimov. "OONI: Open Observatory of Network Interference." OONI. February 26, 2019. Accessed April 29, 2019.

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tests on their internet connection and have the data automatically sent to a public database that the service maintains. Internet-based organizations such as Akami²³ also track trends in traffic usage and publically release reports on internet traffic flow as a whole. Instead of further challenging internet service providers, the federal government could encourage citizens to run scans such as OONI Probe or a similar application. Modifying the Save the Internet Act of 2019 so internet service providers do not need to prove they are treating all traffic equally, and possibly adding a section that would support citizens monitoring their ISPs would help small businesses, make the market more competitive and thus benefit the internet as a whole.

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