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JOINT SENATE AND HOUSE DEMOCRATIC POLICY COMMITTEE

Policy Hearing:
Net Neutrality

Thursday, January 9, 2020 at 11:30 a.m.
Penn State University – The Navy Yard, Building 7R: Auditorium
Philadelphia, PA

AGENDA

11:30 **Call to Order & Opening Remarks**
Senator Lisa M. Boscola, Chair
Representative Mike Sturla, Chair

11:45 **Gladys Brown Dutrieuille**, Chairman, Pennsylvania Public Utility Commission

12:10 **Hannah Sassaman,** Policy Director, Media Mobilizing Project

12:30 **Hon. Andrew Zwicker**, Assemblyman, New Jersey State Legislature

12:50 **Joshua Stager,** Senior Policy Counsel and Government Affairs Lead, Open Technology Institute
Katharine Trendacosta, Manager of Policy and Activism, Electronic Frontier Foundation

1:15 **Closing Remarks**

Good morning, Chairpersons Boscola and Sturla and Honorable Members of the Joint Senate and House Democratic Policy Committee. I appreciate this opportunity to speak with you today about internet neutrality, commonly called net neutrality, in general and the proposed legislation on net neutrality in HB 544, SB 392, and SB 393, particularly SB 393 given its focus on Commission jurisdiction.

Net Neutrality is a short term that the public uses when they talk about Broadband Internet Access Service or BIAS. BIAS is the service that residential, commercial, and industrial consumers purchase from an Internet Service Provider (ISP) so they can communicate, compile data, do research, or stream video over the Internet. BIAS provides access to Internet content. BIAS is sometimes referred to as the "clicks" of Internet service. However, BIAS relies on physical wireline and/or wireless facilities to provide the necessary broadband high-speed access to the Internet. These physical facilities are sometimes referred to as the "bricks" of Internet service.

Broadband has two challenges. The first is building networks, particularly in higher-cost rural areas. The second is the affordability of BIAS, an issue in urban and rural areas alike. The FCC recognized in 2016 that affordability is the single most important issue when it comes to broadband. But, we're not here to talk about broadband today although I know that the General Assembly and the Office of Administration are concerned about that. However, I will limit my remarks today to BIAS and net neutrality. I have, moreover, provided a summary of information on the interplay of

telecommunications, broadband, and BIAS in Appendix A that was already provided to the General Assembly.

The Commission's current regulatory authority over BIAS is set out in Chapter 30. Chapter 30 requires the availability of BIAS. It mandates that a participating incumbent local exchange telephone company, or ILEC, and an ILEC alone, must make BIAS available at speeds defined to be 0.128 megabits per second (Mbps) for uploads and 1.544 Mbps for downloads. The Commission must ensure that the ILECs comply with the duty to make BIAS available within ten business days of a request at those speeds. There is no Pennsylvania-specific mandate to provide higher speeds or ensure that the content delivered with BIAS is not subject to discrimination between edge[1] or content providers. The Commission is not authorized to permit packet management and prohibit packet discrimination (e.g., data packet delivery at different speeds) or resolve disputes about packet treatment. There is also no direct mandate ensuring that the BIAS provided is safe, adequate, reliable, of high quality, and is affordable. Finally, the BIAS speeds set out in Chapter 30 have been overtaken by time, technological advances, applicable federal standards, and consumer expectations.

This limited jurisdiction does not mean that the Commission has been indifferent to proceedings involving BIAS at the FCC, particularly in defense of Chapter 30. The

[1] Refers to a physical device that can forward Internet protocol (IP) packets between legacy networks but does not actually participate in running a network. It can also be a physical device which can provide users with ancillary service such as voice, data, and video downloading. See Harry Newton, *Newton's Telecom Dictionary* (CMP Books: 2004, 20th Ed.), p. 289. It can sometimes also refer to the content or information stored by a provider of that content or information where consumers land following a search for that content or information.

FCC conducted no less than four major proceedings over the past ten to fifteen years on the legal classification of BIAS under federal law. This legal classification dispute is an issue of paramount importance when it comes to BIAS.

The Commission previously acted, in part, to ensure that the FCC did not preempt the General Assembly's authority to address BIAS in Chapter 30 today or as it may act on BIAS in the future. A copy of those filings is contained in Appendix B.

In those filings, the Commission supported a "modified" Title II common carrier legal classification for BIAS as a telecommunications service and not as an information service. This stands in marked contrast to the cable industry view that their BIAS is a Title VI cable service under federal law and, as such, cannot be regulated under Title II as a common carrier – telecommunications service. The FCC decided otherwise in 2015 and prevailed in that view on appeal. However, the most recent United States Court of Appeals for the District of Columbia (DC Circuit or Court) decision in October 2019 affirmed the FCC's 2018 reversion to the "information service" classification.

By modified Title II common carrier classification, the Commission took the position that BIAS is a type of public utility service, similar to telecommunications, and that the providers, in this case the ISPs, should treat all communications alike. The ISPs should not be allowed to discriminate between communications provided by those with whom they have business relationships compared to those with whom they do not. The

ISPs should be allowed to manage the communications on their networks so long as they do so in furtherance of network management and not communications discrimination.

This "common carrier" approach reflects, in part, the historic view that communications providers are like the post office. They deliver all messages in a non-discriminatory fashion but do not control their contents.

This is an important consideration. All too often, the discussions about the legal classification of BIAS or regulatory accountability or whether that service is a matter of state or federal law is translated into allegations that it is regulating the Internet.

It is not.

The oversight and accountability for BIAS as a communications service is not regulating the Internet any more than setting the time, date, location, quality of service, and the price of stamps for mail delivery is regulating the content of every piece of mail that the post office delivers. Our filings provide a little more detail on the technology, economic, and legal issues surrounding BIAS for your information.

The concern about BIAS boils down to the legal classification of BIAS under state and federal law and who, if anyone, will ensure that BIAS service is safe, adequate, reliable, of high quality, and affordable. The answer to this will largely be controlled by the legal classification question about whether BIAS is a common carrier telecommunications service or a non-common carrier information service.

If BIAS is a common carrier telecommunications service, state and federal regulators can take action to ensure the safety, adequacy, reliability, quality of service and, even, affordability of BIAS. If, on the other hand, BIAS is an information service, the FCC alone has regulatory authority although, as I will explain below, the latest federal Court decision on the FCC's legal classification for BIAS puts that traditional view into question. The Court's October 2019 decision upheld the FCC's latest classification of BIAS as an information service but it reversed the FCC's preemption of state laws over BIAS.[2] The Court ruled that the FCC lacked, in the Court's view, the plenary authority to overturn the laws of fifty states when it comes to intrastate communications.

The main concern of many consumers, citizen groups, and state legislatures, as well as the U.S. Congress and the federal Administration, is that ISPs might use their control of the physical network facilities they own to provide BIAS in a way that disadvantages competitors by providing them degraded access and content delivery services. There is also a concern that they will favor content providers with whom they are affiliated or charge unaffiliated content providers higher rates for similar access transmission or content delivery service. There is another concern that they could favor

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[2] *Mozilla Corporation v. FCC*, Docket No. 18-1051 (DCCA October 1, 2019), slip op. at 144. *Digital Justice Foundation, States of New York, Connecticut, Delaware, Hawaii, Illinois, Iowa, Maine, Massachusetts, Mississippi, New Jersey, New Mexico, North Carolina, Rhode Island, Vermont, and Virginia, and the District of Columbia,* and *New America's Open Technology Institute, Free Press, Public Knowledge, Center For Democracy & Technology, Benton Institute For Broadband and Society, Computer & Communications Industry Association, and National Association of State Utility Consumer Advocates (NASUCA)* Petitions for Re-Argument (December 12, 2019). See Reference in Appendix C.

competitors' content with whom they have better financial arrangements while disfavoring other competitors' content without those same arrangements.

This is the "net discrimination" issue. It is an important one given that over 90% of the nation's "last mile" wireline networks that run to any given consumer's home, office, or business are controlled by two industries: the cable and telephone industries. They are also the only providers of ISP service to their consumers. FCC decisions do not require that other ISP service providers get access to the cable and telecommunications company networks to compete for the delivery of voice, data, and video content.

This October 2019 decision is but one in a series of legal classification decisions addressed by the same federal appellate court in Washington over the last ten to fifteen years. Pennsylvania played a considerable part in that legal history given that two of our major ISPs, Comcast and Verizon, challenged two of the FCC's earlier legal decisions. Those challenges and decisions resulted in remands to the FCC that, in turn, and following a change in administrations, produced the latest October 2019 decision. Appendix C contains those legal decisions to explain the legal history of the legal classification of BIAS under state and federal law.

Why is this legal classification of BIAS, particularly the latest federal court decision, an important factor to consider in the proposed legislation? The main reason legal classification is important is because BIAS plays, and will increasingly play, an indispensable role in our social, economic, and cultural life and medical well-being.

Most of today's consumer-business transactions rely on BIAS or the availability of BIAS, particularly for the delivery of Internet-based video content. Moreover, BIAS is important for video streaming delivery. For example, one streaming video service alone, Netflix, constitutes about 37% of the total internet traffic in North America in the evening[3] and 15% of all global traffic last year.[4] Netflix and YouTube collectively comprise about 25% of all global traffic.[5] Many local, state, and federal agencies rely on BIAS to interact with citizens, especially during emergencies.

It is important given that the FCC estimated in 2009 that it could cost the country about $50 billion dollars to build a network capable of providing BIAS at 10-30 mbps and $350 billion for a network capable of providing 100 mbps.[6] When you consider these costs and the fact that Chapter 30 mandated 1.544 Mbps download speed standard, the investment needed to meet the demand for higher BIAS speeds is considerable.

In addition, the cable (CATV) and telecommunications companies may have 90% of the "last mile" wireline networks running to a consumer's location but they do not use the same technology. The telecommunications companies rely on Internet Protocol (or

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[3] https://time.com/3901378/netflix-internet-traffic/ (last accessed 12/26/19).

[4] https://www.pcmag.com/news/364353/netflix-and-youtube-make-up-over-a-quarter (last accessed 12/26/19). Netflix and Youtube combined make up over 25% of global internet traffic. Amazon Prime is 3.75%, PlayStation is 2.7% *Id.* Amazon is responsible for more than 49% of all online sales and about 5% of all retail sales in the US alone. https://hostingfacts.com/internet-facts-stats/ (last accessed 12/26/19).

[5] IP is a communications protocol originally developed by the Defense Applied Research Agency (or DARPA) to ensure communications would survive a nuclear war. That network did not permit commercial use until that ban was removed in the early 1990's. See, e.g., https://www.pcmag.com/news/364353/netflix-and-youtube-make-up-over-a-quarter (last accessed 12/26/19).

[6] *In re: National Broadband Plan For Our Future,* Docket No. 09-51, FCC Staff Update (September 29, 2009).

IP) to provide their voice (or Voice over Internet Protocol or VoIP), data (research), and video (streaming or fixed channel) content.[7] BIAS is basically a product of government research and funding that was privatized in the 1990s.

That is not true for cable. The cable providers rely on Data Over Cable Service Interface Specification (or DOCSIS). DOCSIS 3.0 was developed by Cable Labs Research, a research offshoot supported by the cable industry.[8] DOCSIS must be "interconnected" with IP networks owned by the telephone companies. This "interconnection" function is important in understanding how consumers get BIAS and can communicate seamlessly when technological protocols vary. It is also why the proposed legislation may want to address the important issue of "wholesale" interconnection for transmission among various network owners and edge providers of content or applications to ensure that this continues.

While these networks do interconnect to provide voice, data, and video in IP, the needs of these IP packets that provide voice, data, and video services are not alike. The routers and services used to provide IP contain "headers" for transmission. These "headers" tell the network operator who owns the packet, what the packet contains, what type of packet it is, where the packet should go, and what priority it should get. The use of this technological function, sometimes called Deep Packet Inspection or DPI, is at the heart of the BIAS and net neutrality debate.

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[7] *See* http://www.inetdaemon.com/tutorials/internet/history.shtml (5/27/10).
[8] Harry Newton, *Newton's Telecom Dictionary* (CMP Books: 2004, 20th Ed.), p. 265.

Voice over Internet Protocol, especially, must have Real Time Priority (RTP) in the transmission of conversations in IP over routers and servers. Without RTP, BIAS consumers will experience latency (sounding like you are talking with an echo) or jitter (pieces of the conversation are dropped). An additional concern arises over ensuring that the RTP for emergency or disaster communications is greater than the priority needed for other voice service let alone data or video content delivery (e.g., 911/E911 emergency voice and data traffic over other voice, data, or video content delivery).

Data or research IP packets, on the other hand, do not need real time priority. Their content can be disassembled and reassembled without the jitter and latency of voice. While these data packets do not need priority, consumers seeking data transmission, typically large institutional entities, are often willing and able to pay a premium for transmission priority. The absence any regulatory oversight, given the network owners' fiduciary duty to their shareholders, could make it easier to prioritize data packets over voice packets as a commercial practice despite their different needs.

Video packets, on the other hand, can get distorted or freeze if they are being sent over a long distance. Local buffering, which stores that content closer to the consumer so it will not freeze, mitigates this problem. This means that video does not need real time priority although buffering may be needed. Due to consumer demand, content providers may be willing and able to pay a premium for video transmission and buffering, especially if they are a big provider like Netflix. That may not be the case, however, with smaller content providers who also need the same transmission and buffering capabilities.

And, again, the absence any regulatory oversight, given the network owners' fiduciary duty to their shareholders, could make it easier to prioritize some video packets over others, even voice, as a commercial practice despite the real difference between them.

As you can see, the need to "read" and "prioritize" IP packets at the routers and servers used to provide BIAS is a key part of the BIAS and net neutrality debate. All packets are not alike and network management which recognizes that is important.

By the same token, how network owners use their routers and servers, or interact with others who use routers and servers outside their service territory, has given rise to concerns about unacceptable or anticompetitive "packet discrimination" compared to acceptable and necessary "packet management" when it comes to transmitting these packets to provide the BIAS service needed for voice, data, and video content. SB 393's proposal to prohibit "paid prioritization" in Sec. 30A01 while permitting "reasonable network management practices" in Sec. 30A01(1) appears to recognize the difference.

This focus on IP packets for voice, data, and video has been limited to the technology used by the telecommunications industry. However, this same concern arises when it comes to the cable industry and its members' use of the DOCSIS 3.0 technology to provide voice, data, and video content on their cable networks.

This difference has legal implications. Telecommunications is a federal Title II common carrier service. Cable is a federal Title VI service, which is not common carrier regulated. For years, the cable industry has claimed that its companies are not

telecommunications providers and that their voice product is not telecommunications. In 2015, the FCC rejected that claim when it classified cable and mobile wireless BIAS as a Title II common carrier service. The cable industry vigorously opposed that classification but lost on appeal. It also does not help that the FCC has had a proceeding underway since 2004 on the classification of VoIP as either a "telecommunications" or "information" service but has yet to decide.[9]

Will a competitor's voice packet get the real time priority it needs compared to the streaming video packet of an affiliated provider who owns the networks serving the consumer? Will a content provider who sells streaming video but owns no network in direct competition with a network owner who owns a network and provides video get the same buffering and transmission it needs so that its content does not freeze? Can a network owner be allowed to manage the "up and down" nature of IP packets, which come in bursts followed by pauses, so that voice quality is not compromised?

Who ensures that the public interest in packet management is consistent across the board regardless of whether a content provider does or does not own the facilities needed to serve end-user consumers? Who resolves disputes between network owners who claim their packet practices are network management as opposed to a provider without facilities who claims they are experiencing packet discrimination?

[9] *In re: IP-Enabled Services,* Docket No. 04-36.

Where will disputes about BIAS be resolved when they inevitably arise? Who ensures that BIAS is safe, adequate, reliable, of high quality, and affordable? Who ensures that network owners provide the interconnection that other transmission owners or edge providers of content and applications will need to reach end-user consumers?

In response to these questions, much of the public discussion about BIAS and net neutrality insists that the best solution is to do nothing or else impose a uniform mandate requiring the equal treatment of all IP packets as if all IP packets are the same. However, all BIAS packets are not the same from a technological perspective.[10]

By the same token, other public discussion recognizes the different needs of IP packets but fails to address how the public interest of prohibiting discrimination can also ensure that there are adequate revenues to finance network upgrades. The focus is usually on preventing an ISP provider of BIAS with a network from discriminating against providers who provide content but do not have networks.

This challenge is compounded by the fact that the FCC does not require an owner of a network to provide access to other ISPs to compete against their networkowner's ISP to provide BIAS and Internet content. That was the practice back in the days of dial-up low-speed access to the Internet but is not the case today.

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[10] Edward W. Felton, *The Nuts and Bolts of Net Neutrality* (Practicing Law Institute: Federal Communications Bar Association), 24th Annual Institute on Telecommunications Policy and Regulation, 2006.

As noted earlier, the current state of federal law is ever-changing. On October 1, 2019, the federal Appellate Court upheld the FCC's January 2018 ruling that reclassified, yet again, BIAS as an information service. That decision reversed the previous FCC order, also upheld by the same federal Appellate Court, which had classified BIAS as a common carrier telecommunications service. The October 2019 decision upheld the information service classification but went on to reverse the FCC's preemption of state authority over BIAS. The Court said the FCC "lacked the legal authority to categorically abolish all fifty States' statutorily conferred authority to regulate intrastate communications."[11]

There are several petitions for an *en banc* rehearing of this decision now pending in the DC Circuit. Any Pennsylvania-specific legislation may be impacted by subsequent federal developments. This warrants consideration of the general suggestions set out below as well as the specific observations about the proposed legislation.

First, the proponents may want to consider a "severability" provision in which any provision in the statute is overturned or preempted by federal law. This ensures that the invalidation of one provision does not summarily invalidate other provisions of the same legislation or the entire statute itself.

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[11] *Mozilla Corporation v. FCC*, Docket No. 18-1051 (DCCA October 1, 2019), slip op. at 144. *Digital Justice Foundation, States of New York, Connecticut, Delaware, Hawaii, Illinois, Iowa, Maine, Massachusetts, Mississippi, New Jersey, New Mexico, North Carolina, Rhode Island, Vermont, and Virginia, and the District of Columbia,* and *New America's Open Technology Institute, Free Press, Public Knowledge, Center For Democracy & Technology, Benton Institute For Broadband and Society, Computer & Communications Industry Association, and National Association of State Utility Consumer Advocates (NASUCA)* Petitions for Re-Argument (December 12, 2019).

Second, the proponents may also want to consider a general provision that authorizes the Commission to act consistent with state and federal law. This may better ensure that if the federal law changes on BIAS and net neutrality, evident in the four decisions over 10 to 15 years, we are better positioned to respond to those changes.

Third, the proponents may also want to develop provisions to ensure that transmission networks can interconnect with each other at the wholesale level and that the Commission can resolve relevant disputes. This is an important consideration because a lot of today's BIAS is provided over an updated public switched telecommunications network but access could be diminished if the services provided over that network are considered information service and not telecommunications. Also, such a provision may better advance the competition goals set out in Chapter 30. Having made these general observations, I shall address the legislative proposals in more detail.

Senate Bill 393. This proposal appears to be consistent with the view that communications services like BIAS are common carrier public utility service. However, there are some areas that may warrant further clarification.

Scope of Commission Authority. For example, Section 30A01 of SB 393 defines "broadband Internet access service" as a "mass market retail service by wire **or radio**..." The provision of BIAS by "radio" is mainly performed by commercial mobile radio services or CMRS wireless carriers.[12] While the FCC's earlier decision prior to the

[12] Fixed wireless BIAS may be provided by wireline telecommunications or communications entities.

current case treated mobile wireless BIAS as a common carrier service, that law is unsettled on how or whether that is retained under the current FCC decision.

Moreover, Section 102(2)(iv) of the Public Utility Code, 66 Pa. C.S. § 102(2)(iv), prohibits the Commission from exercising jurisdiction over the operations of wireless carriers operating in the Commonwealth that are not otherwise public utilities. Title 66 may need to be amended or clarified on any legislative intent so that it is clear whether the Commission can exercise jurisdiction over mobile wireless BIAS as opposed to fixed wireline BIAS for purposes of preventing paid prioritization or packet discrimination. It is worth noting that other states have exercised, and continue to exercise, jurisdiction to address wireless service although only as to terms and conditions of service. That is because federal law prohibits the states from regulating rates or entry except in some circumstances not relevant to today's hearing.

In addition, wireline BIAS is provided by wireline telecommunications carriers that are under the Pa. PUC's jurisdiction, e.g., landline telephone companies, but there are other wireline providers of BIAS that are not. For example, CATV companies that provide BIAS "by wire" to end-user consumers may not be under the Commission's jurisdiction. The proponents of the legislation might want to clarify whether the

Commission can exercise subject matter jurisdiction over BIAS provided by cable companies within the Commonwealth.[13]

Technological Neutrality. It is important to understand that there are other providers of BIAS using other technologies such as satellite, fixed wireless Internet access service providers (WISPs), and, possibly, depending on the results of the upcoming auction of federal support, municipal or county providers. The proponents may need to address whether the Commission has jurisdiction over BIAS regardless of technology, in part to meet the technological neutrality mandate in Section 253 of federal law,[14] or whether the Commission's jurisdiction is confined only to the wireline BIAS of the incumbent and competitive telecommunications carriers that the Commission already regulates.

VoIP Freedom Act. Another issue that may need to be addressed is reconciling the provisions of these proposals with the current VoIP Freedom Act of 2008, 73 P.S. §§ 2251.1 – 2251.6 (*VoIP Freedom Act).* The proposed legislation (SB 393) may need to be reconciled with the *VoIP Freedom Act* for two reasons.

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[13] It is also worth noting that, independent of net neutrality, some states, such as New York, also continue to oversee CATV service.

[14] Section 253 of federal law, 47 U.S.C. § 253, prohibits state statutes or regulations that impede the delivery of interstate or intrastate telecommunications although states can impose, on a competitively neutral basis, and consistent with the universal service mandates of Section 254, requires to promote universal service, protect the public safety, ensure the continued quality of telecommunications service, and safeguard consumer rights.

First, under SB 393, the statutory classification of BIAS as a "public utility service" set forth in Section 102(1)(ix) suggests that the Commission has jurisdictional authority to regulate the rate for BIAS when it is bundled with a VoIP product. This is an important issue because, today, BIAS and VoIP services are often offered as part of a bundled package to end-user consumers where the price is not regulated.

Second, under the *VoIP Freedom Act*, the Commission does not exercise rate regulation or address consumer complaints over retail VoIP services except under a statutorily prescribed set of circumstances (e.g., imposition of certain fees, handling of 911/E911 emergency calls). While there is a limited exception in those circumstances when VoIP is provided as a "protected" service under tariff (typically an ILEC's stand-alone voice service), the same does not hold true for other types of VoIP today. Consequently, the proponents may want to reconcile the authority granted in SB 393 with the *VoIP Freedom Act* when it comes to bundled or stand-alone retail VoIP service that is not protected today or is part of bundled BIAS service.

Paid Prioritization and Preferential Treatment. Given the concern for unacceptable packet discrimination as opposed to necessary packet management and the real differences in the packet needs for voice, data, or video, a blanket prohibition on "paid prioritization" may be controversial. Opponents may view the prohibition, despite the ability and willingness of some content providers to ensure that their data or video packet has priority over the data or video packet of others, as an impediment to getting the revenues needed for network investment. On the other hand, proponents that are less

able to incur the additional costs for a transmission service priority, compared to those with whom they compete and that are able and willing to pay more, may see this as a needed item to ensure that their "edge" service is equal to that of the larger content providers.

If the proponents decide to prohibit paid prioritization as envisioned in the current drafts, there may be a need to clarify through amendment in Section 30A01 (SB 393 at pp. 3-4) that:

a. Network management and prioritization of traffic flows for public safety must occur, particularly real time priority for voice, when it comes to public safety purposes (e.g., prioritization of 911/E911 voice and data traffic) but that this does not constitute "paid prioritization" and should not be the subject of additional costs when the voice, data, or video, or some combination thereof, is for this purpose.

b. Network management and prioritization of traffic flows for lawful purposes undertaken to maintain network quality, safety, reliability, adequacy, and resiliency (e.g., network management for cybersecurity, network management for restoration of service operations to critical infrastructure and anchor institutions such as hospitals and police stations) do not constitute impermissible or unlawful "paid prioritization" when the voice, data, or video, or some combination thereof, is for this purpose.

c. The prohibition on "preferential treatment" set out in proposed Sec. 30A02(3) (SB 393, p. 4) may need to clarify that this "preferential treatment" prohibition does not include a 911/E911 public safety answering point (PSAP) "Internet customer" needs or those of similar entities when they are involved for public safety purposes (e.g., federal, state, and local government authorities involved with national security and/or public safety functions and emergency communications).

d. The same prohibition on "preferential treatment" may want to carve out an express exemption for restoring BIAS to critical infrastructure and anchor institution BIAS customers as well.

Exclusion of Dial-Up Internet Service. Dial-up Internet service was the first form of BIAS and continues to play an important, though diminishing, role. It still remains important for lower-income consumers who may be unable or unwilling to pay the higher rates for Chapter 30 BIAS or BIAS at even faster speeds. While this service may well diminish over time, particularly as public policy supports the deployment of advanced networks that replace dial-up, the exclusion for dial-up in the Sec. 30A01 BIAS definition may warrant reconsideration.

Violations in the Delivery of BIAS. The proponents may need to clarify whether a BIAS public utility who violates the provisions of the proposed legislation violates the Public Utility Code in addition to any violation of the Unfair Trade Practices and Consumer Protection Law, or both. Clarification of this enforcement authority will be important in having the Commission:

a. Promulgate its own rules and regulations "necessary to administer and enforce" the proposed law under Sec. 30A03 (SB 393, p. 5).

b. Adjudicate related actions and assessing penalties even before final rule regulations are put in place.

Consumer Dispute Resolution. The general language in the legislative proposals may need to address the Commission's authority to address the safety, adequacy, reliability, quality of service, affordability, and availability of BIAS to Pennsylvania consumers. This already occurs with telecommunications today and for BIAS under

Chapter 30 although this authority is limited to making BIAS available within ten business days.

The limitation of consumer dispute resolution to only the Unfair Trade Practices provisions of Pennsylvania law could leave consumers bereft of a forum for resolution of their disputes. That could arise in those instances where the Attorney General would not act until a threshold number of clearly identifiable and similarly grouped complaints has arisen. If that threshold has not arisen, consumers with those disputes below that threshold could be unable to avail themselves of the Commission's case-by-case authority as under the current Public Utility Code.

The proponents may also need to consider a provision authorizing the Commission to act consistent with federal law. In the event the FCC asserts plenary jurisdiction over BIAS or the preemption decision is subsequently limited by the *Shreveport-Campion* line of cases, which holds that Congress' interstate commerce authority is plenary and includes intrastate commerce, the absence of a provision allowing the Commission to act consistent with state and federal law could leave consumers with only the distant FCC to resolve their dispute. A provision authorizing the Commission to act consistent with federal law better positions Pennsylvania to resolve disputes in a local and less costly forum compared to the FCC. The *Illinois Payphone* line of decisions requiring the states to enforce federal law as a constitutional mandate could be relied upon for this approach.

The recent "pole attachments" proceeding at the Commission is a case in point. Federal law allows the states to assert jurisdiction although the Commission deferred to the FCC for a number of years. The Commission recently changed that approach in part because parties with pole attachment disputes in Pennsylvania could use a local and less expensive Commission forum compared to the FCC in D.C. While that approach was allowed under federal law, a state law provision allowing the Commission to act consistent with state and federal law could better enable Pennsylvania to address BIAS.

Intrastate Authority and BIAS. As indicated above, the recent federal Appellate Court decision upholding the reclassification of BIAS from a telecommunications service to an information service reversed the FCC's preemption of state authority over intrastate communications. While this language may be read to authorize state regulation, the *Shreveport-Campion* line of cases still holds that Congress' authority over interstate commerce is plenary and can include intrastate commerce, in this case BIAS, if supported by an appropriate preemption analysis.

One possible way to avoid a preemptive action of Congress or the FCC would be to tie the BIAS legislation to the Commonwealth's contract procurement authority. Any legislation under consideration could prohibit the Commonwealth from contracting with an entity that does not abide by the provisions enacted by the General Assembly as set out in SB 393, Section 30A04(b) and (c). Other states have similar provisions.

In that case, Pennsylvania is better poised to defend its legislation as a Tenth Amendment reserved authority over intrastate BIAS. This may better enable Pennsylvania to resist a contrary Congressional determination or subsequent decision of the FCC that would try to interpret this Court October 2019 decision more narrowly in the future than is the case today. And, again, another way would be to authorize the Commission to act expressly consistent with, and in furtherance of, state and federal law.

Other States. I would add that Pennsylvania is not alone in considering BIAS legislation. Laws have been enacted in six states and resolutions or executive orders have been promulgated in many other states. Some states have also invoked their procurement authority to buttress net neutrality and BIAS. References are provided in Appendix D.

In June of 2019, the State of Maine enacted a net neutrality law and prohibition on paid prioritization enforced by the Maine Attorney General.

In 2019, Colorado passed net neutrality legislation.[15] The law is limited to recipients of state broadband grants and provides specific exemptions (waivers) for emergency communications or at the request of law enforcement, public safety or national security governmental authorities and addresses copyright infringement or other unlawful activity. Paid prioritization is noted in Section 40-15-209(1) (b) as an activity

[15] Senate Bill 19-078. It is now codified as Section 40-15-209, Colorado Revised Statutes.

that would make a provider ineligible to receive support, with previously granted support subject to being returned to the state Broadband Board. The Colorado Commission amended its rules to include the legislation (Proceeding No. 19R-0458T, with rules adopted in Decision No. R19-0914). Specifically, Rule 2850 addressed Net Neutrality Violations.

Four other states, California, Oregon, Vermont, and Washington, enacted net neutrality laws. Of those, California and Vermont reached an agreement with the Department of Justice to delay implementation until the pending California lawsuit against that state's net neutrality law is resolved or the ongoing federal appeal is decided.

A recent National Regulatory Research Institute (NRRI) study on state responses to the FCC decision to reclassify BIAS from a telecommunications service to an information service, upheld on appeal in October 2019, reveals a variety of state responses.[16] The study shows that thirty-six states have proposed or passed a resolution, bill, or executive order.

One focus is state procurement. Six states (Hawaii, Montana, New Jersey, New York, Rhode Island, and Vermont) issued executive orders requiring, among other things,

[16] https://pubs.naruc.org/pub/45ACE3A2-AAEA-417D-2416-B6862C9D4435. Last accessed 12/26/19.

companies that contract with state agencies to adhere to net neutrality rules when BIAS had been classified as a telecommunications service.

I want to thank you for the opportunity to provide this testimony and look forward to answering any questions that you may have.

Senators Boscola and Farnese, State Representatives Sturla and Fiedler, all elected representatives, distinguished guests, and community members here in South Philadelphia today - thank you for inviting me to lend my strong support to Senate Bills 392[1] and 393[2], and House Bill 544[3], which would, both individually and in combination, greatly help our Commonwealth provide its residents with the tools we need to communicate, to advocate for change, and to provide our families with dignity, by enshrining net neutrality into state law.

My name is Hannah Sassaman, and I am the policy director at Media Mobilizing Project[4]. For over 15 years, our organization has worked at the intersection of technology and racial and economic justice in Philadelphia and with partners around the country.

I want to start by bringing in the voices of some of our coalition members at the Philly Tech Justice coalition we've helped to restart in the city, so we hear from everyday people on why net neutrality matters to them.

First, this is from Andrea Adeshigbin, a 25 year old student, assistant daycare teacher, and former high school teacher:

> "As a former High School teacher the internet is an invaluable resource that enriches student learning by giving students access to information curated by other thought leaders around the world. Those resources help compensate for a lack of school funding in a city which has endured too many school closings, and that have an excess of under performing/high needs schools. It is imperative that students and teachers alike have access to a full and open internet, where access is not sold to the highest bidder."

And here's another testimony from Kris Henderson - they are a 33 year old trans person of color fighting to end mass incarceration across the Commonwealth:

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[1] SB 392 - https://www.legis.state.pa.us/CFDOCS/Legis/PN/Public/btCheck.cfm?txtType=PDF&sessYr=2019&sessInd=0&billBody=S&billTyp=B&billNbr=0392&pn=0412

[2] SB 393 - https://www.legis.state.pa.us/CFDOCS/Legis/PN/Public/btCheck.cfm?txtType=PDF&sessYr=2019&sessInd=0&billBody=S&billTyp=B&billNbr=0393&pn=0413

[3] HB 544 - https://www.legis.state.pa.us/CFDOCS/Legis/PN/Public/btCheck.cfm?txtType=PDF&sessYr=2019&sessInd=0&billBody=H&billTyp=B&billNbr=0544&pn=0535

[4] http://www.mediamobilizing.org

> "As a trans person, I use the internet to connect to other trans people about health care, how to manage dysphoria and to create support systems. Soon I will undergo top surgery and having access to the internet means I can talk to people around the world who have or are going through the same thing. I know some trans people but the agender community is comparatively small. Without open internet, I would lose access to an important support system in my life."

Our organization was founded on the premise that "movements begin with the telling of untold stories," and we spent much of the first few years of our existence producing narrative films and community videos with taxi workers, Head Start families, low-wage healthcare providers, Black and Brown public school students, and the many isolated communities fighting for basic resources to live their lives with dignity in Philadelphia and in Pennsylvania.

From there, we began building coalitions and networks with those groups, and many other faith, immigrant justice, education, union, and other groups, to take on the challenges they faced, while also directly challenging the local communications infrastructure that kept our communities isolated and limited their ability to challenge power and advocate for the changes they needed. In the early days, we sent these videos on CD to members of Congress, or screened them in organizing meetings supporting workers in their fight to form their union, but we always struggled to use the internet to help share our community members' stories.

Why was it hard to use the internet to build power with our communities? We found that most of the people we worked with had one major problem internet communication-wise when it came to winning their campaigns: **simply affordable access.** Many organizations' members and communities had very low broadband penetration - according to the US Census, Philadelphia had the third worst internet access in 2015, and now has the second worst internet access, of any of the top ten big cities in America[5]; which meant that our partner organizations' members weren't creating their own websites or online organizing campaigns to share their powerful stories - they were mostly locked into social media platforms you could access on the phone, where the profit motive and algorithms of a Facebook or Instagram controlled how they connected with people.

If you are a public school student who has to wait for access at the library, or use your phone at the McDonald's to find other students online so you can organize to save your school from being turned into a charter, that's a big disadvantage against well funded for-profit charter organizations or lobbyists who can push elected officials, access earned media, or pay for online ads to influence their targets.

Philadelphia was the only major city to have its broadband internet penetration go down between 2016 and 2017, according to the *Philadelphia Inquirer*'s analysis of census records - almost exclusively because of poverty, and community members' inability to afford the internet.

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[5] https://www.inquirer.com/news/comcast-digital-internet-access-philly-poor-people-20181210.html

A world without net neutrality is a world that makes all of the above conditions even worse, not just in cities like Philadelphia, but in smaller cities with low income populations, and in rural counties across the Commonwealth. After FCC Commissioner Ajit Pai and the Trump Administration moved to repeal the Obama-era extraordinarily popular Net Neutrality rules, big telecom promised that it was Net Neutrality that had kept them from investing to build out internet and upgrade their communications infrastructure in states like Pennsylvania.

But the Center for Rural Pennsylvania reported to the Legislature in June of last year, at least 800,000 Pennsylvanians have no easily accessible internet access at all, and that despite the FCC's claims that 100 percent of Pennsylvanians could get online at 25 megabits per second, that independent testing showed that most counties in PA experienced substantially slower speeds than that, especially in rural counties[6].

Comcast, Verizon, and other incumbents nationwide have absolutely not improved access for our communities, rural and urban, over the last years, making their claim that net neutrality impeded investment and growth an outright lie.

Part of what the FCC's 2015 order on Net Neutrality did was indeed stopping big companies like Comcast from blocking our voices, slowing them down, or making us pay to access our fellow community members.

But the order the FCC passed in 2015 also enshrined transparency around the costs of internet services, and their speeds, letting consumers statewide know exactly what they were paying for, and letting them advocate for better affordability and competition. By adding ISPs to a list of Pennsylvania Public Utilities, as Senate Bill 393 would do, by pushing for transparency and public disclosure, as Senate Bill 392 would do, and by reenshrining Pennsylvania consumers' rights to an internet without blocking, throttling, and paid prioritization, as House Bill 544 and all the bills on the table would do, we'd go far towards protecting, expanding, and enhancing our communities' rights to communicate.

[6] https://www.rural.palegislature.us/broadband/Broadband_Availability_and_Access_in_Rural_Pennsylvania_2019_Report.pdf

ELECTRONIC FRONTIER FOUNDATION

January 9, 2020

Testimony of Katharine Trendacosta, Manager of Policy and Activism, Electronic Frontier Foundation before the Pennsylvania Joint Senate and House Democratic Policy Committee hearing on net neutrality:

The Electronic Frontier Foundation is a leading nonprofit organization defending civil liberties online. We have over 30,000 dues-paying members from all over the country, including Pennsylvania. Founded in 1990, EFF advocates for policies that protect privacy, freedom of expression, and innovation.

Net neutrality is the principle that Internet Service Providers should treat all data that travels over their networks fairly, without improper discrimination in favor of particular apps, sites, or services.

Often, when talking about net neutrality, we talk about three practices in particular: blocking, throttling, and paid prioritization. Blocking prevents users from accessing a webpage or service. Throttling is the slowing of a user's Internet speeds. And a paid prioritization is when an ISP charges for some Internet services to be sped up, while all the rest are slowed down.

Outside of blocking, throttling, and paid prioritization, net neutrality protections include preventing economic discrimination at interconnection points, the places where data enters an ISP's network. The most famous example of an interconnection dispute was Comcast slowing down Netflix traffic at the points where Netflix servers connected with Comcast's wires.

Another non-net neutral practice is discriminatory zero-rating. This is the practice of exempting certain types of traffic from counting against a data cap, often because the data is either from a service the ISP owns or the ISP has made a deal with a web platform. Not only has zero rating been shown to be harmful to low-income broadband users[1], but it raises the cost of data for all users[2]. For all intents and purposes, the FCC was in process

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[1] *See* Letter from Western Center on Law and Poverty to California State Senator Ricardo Lara (May 22, 2018), available at https://sd11.senate.ca.gov/sites/sd11.senate.ca.gov/files/sb822_wclp_letter_on_zero_5-23.pdf.

[2] Epicenter.works, *The Net Neutrality Situation in the EU,* (January 29, 2019) pg. 61 available at https://en.epicenter.works/sites/default/files/2019_netneutrality_in_eu-epicenter.works-r1.pdf.

of banning most zero rating practices companies like AT&T was engaging in, finding them to be in violation of the 2015 ne. t neutrality protections. Those investigations were ended and the Order repealed by the new administration.

Therefore a ban on just blocking, throttling, and paid prioritization—or one or two of them—is not truly net neutrality legislation. True net neutrality legislation does not leave loopholes for companies to take advantage of to the detriment of users. True net neutrality legislation does not ban reasonable network management or prevent ISPs from prioritizing first responders or telemedicine. It merely prevents ISPs from prioritizing traffic just to make more money. It prevents ISPs from manipulating the Internet marketplace by slowing traffic to those who do not pay or slowing traffic to its competitors.

Large companies—the large ISPs that also own content and tech companies of their own—have a history of ignoring and violating this principle. Here are just a two of many examples[3]:

In 2005, Madison River, an ISP based in North Carolina was found to be blocking what are called Voice over Internet Protocol ports so that its customers couldn't use its Internet service to make calls through third-party providers like Vonage.

In other words, customers who did not use traditional telephone service and were relying on Vonage to make calls were unable to. Even if they were trying to dial 911 in an emergency.[4]

In 2012, AT&T chose to block data sent to and from users of Apple's Facetime software.[5] In particular, AT&T announced in August of 2012 that only certain, more expensive data plans would be able to use Facetime, even acknowledging that "the company was using it as a lever to get users to switch over to the new plans which charge for data usage in tiers."

Net neutrality ensures that the company or municipality that gives you access to the Internet does not get a say in what you see or do once you are online. It also means that when you put your voice, business, or creativity online, it is being shared with others the

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[3] Tim Karr, *Network Neutrality Violations: A Brief History*, Free Press (Apr. 25, 2017), available at https://www.freepress.net/blog/2017/04/25/net-neutrality-violations-brief-history.

[4] Jonathan Krim, *Phone Company Settles in Blocking of Internet Calls*, WASHINGTON POST (Mar. 4, 2005), available at http://www.washingtonpost.com/wp-dyn/content/article/2005/03/25/AR2005032501328.html.

[5] David Kravets, *AT&T: Holding Facetime Hostage is No Net Neutrality Breach*, WIRED (Aug. 22, 2012), available at https://www.wired.com/2012/08/facetime-net-neutrality-flap.

same way as any other data. Under net neutrality, ISPs don't get to manipulate access and access speeds in order to pick winners and losers. But ISPs have shown a willingness to do so. And so what we needed was a cop on the beat.

In 2015, the Federal Communications Commission adopted the Open Internet Order, which gave the FCC the authority to investigate and punish net neutrality violations like these. But in 2017, a new FCC chair voted to repeal the net neutrality protections of the 2015 Open Internet Order. And within a year we were already seeing the consequences of that decision.

The repeal went into effect on June 2018. In July of 2018, the Mendocino Complex Fire began ravaging California. It was, at the time, the largest fire in California history.

In fighting that fire, Santa Clara County in California deployed a vehicle that, according to Santa Clara County Fire Chief Anthony Bowden, is used to "track, organize, and prioritize routing of resources from around the state and country to the sites where they are most needed."[6] It depended on Internet access provided by a Verizon SIM card to do that work.

Santa Clara discovered that data to the vehicle was being throttled during the fire. When Verizon was asked to restore full speed to the device in the interests of public safety, a Verizon representative said that the Santa Clara County Fire would have to switch to a new, more expensive data plan. As a result, you literally had fire fighters tethering their personal phones to keep their equipment running in the middle of a state emergency and no legal recourse.

Santa Clara County joined numerous public interest advocates, local governments, and large and small Internet companies in challenging the FCC's repeal of net neutrality protections. Under the old order, the FCC could have investigated Verizon's conduct during the fire. Under the new one, there was no venue for Santa Clara to call for an investigation into the danger to public safety this action posed. That is why they have turned to state lawmakers here in California.

Net neutrality is tied to public safety. In addition to the example provided by Santa Clara, people go online during disasters for all sorts of reasons: to check on loved ones, find out if they need to evacuate, find emergency resources, and so on. And if ISPs have made deals and decisions that funnel users to places with wrong or unhelpful information, that is a problem.

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[6] Declaration of Fire Chief Anthony Bowden in Mozilla Corporation v. FCC, (August 20, 2018), available at https://www.sccgov.org/sites/opa/newsroom/Documents/Bowden%20Decl%20and%20Ex%20A.pdf

All governments, city, county, state, and federal have an interest in the public safety of their citizens. And if the FCC has abandoned its role in this arena, states can and should step in.

In October, the Court of Appeals for the D.C. Circuit ruled on Mozilla v. FCC. The ruling recognized both the importance of public safety—sending that issue back to the FCC—and rejecting the FCC's attempt to preempt states from enacting their own net neutrality laws.[7]

Net neutrality promotes innovation, competition, and free expression online by helping to make the Internet a level playing field. Net neutrality has been has been the foundation of equality and opportunity on the Internet. Net neutrality protections can become public safety protections. It's in the best interests of everyone—except maybe for the profits of the largest ISPs—that there be net neutrality protection

[7] *Mozilla v. FCC*, 940 F.3d 1 (D.C. Cir. 2019).

Testimony of Joshua Stager
Senior Counsel, New America's Open Technology Institute

Respectfully submitted to the

Commonwealth of Pennsylvania
Joint Senate and House Democratic Policy Committee

Regarding

Policy Hearing on Net Neutrality

January 9, 2020

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Introduction

My name is Joshua Stager, and I am the senior counsel at the Open Technology Institute, or OTI. Since 2009, OTI has studied the broadband market, helped lawmakers develop internet policy, and worked to close the digital divide. Through this work, we have reached an inescapable conclusion: we need a law that protects net neutrality. The Federal Communications Commission (FCC) understood this as far back as 2005, when it began its first proceeding on the issue. After a decade of debate, the FCC decided in 2015 to create federal rules. Those rules were strong, consensus-driven, and upheld in federal court. OTI was deeply involved in the yearslong effort to craft those rules, and we continue to support that regime.

However, in 2017 the new FCC leadership appointed by President Trump decided to repeal those rules and, in a radical move, entirely abdicated the agency's authority to oversee internet service providers (ISPs). Thus, after more than a decade of back-and-forth debate about how to protect net neutrality, the current FCC has decided that it should no longer protect net neutrality at all. This approach is nonsensical, and it is why we need states like Pennsylvania to step in.

My remarks will first discuss why we need to restore net neutrality. Second, I will explain how Pennsylvania is at risk. Lastly, I will examine the three bills that have been introduced.

I. Net neutrality should be codified in law

At a high level, net neutrality is the basic principle of nondiscrimination that we find throughout common carriage law. It applies to many networked industries, from telephones to airlines. Net neutrality is also a protection against *gatekeeper power*—the threat that the ISPs that we all rely on to access the internet could control online content, or determine which online businesses succeed or fail. ISPs should be neutral. This neutrality has been part of the internet since its inception, and it helps explain why the internet developed into a platform for innovation and free speech.

In the early days of the internet, neutrality was respected as an almost unspoken norm. Today, that norm is breaking down. What changed? First, ISPs now have the technical ability

to discriminate traffic on their networks. This capability did not exist in the early days of the internet. Second, the market has consolidated. 20 years ago, Americans had many options for internet providers. Today, thanks to a wave of mergers, just four companies now dominate the market. These four companies have enough market power to act as gatekeepers of the internet—if the law allows it.

This combination of factors means the norm of neutrality is no longer guaranteed and, indeed, has been violated many times. In 2007, Comcast throttled a file-sharing service. In 2012, AT&T blocked FaceTime. In 2014, all of the big ISPs quietly degraded their own networks to extort fees from Netflix and other companies. This persistent creep of net neutrality abuses is what motivated the FCC to act in 2015, and it is why we still need rules today.

II. The federal repeal of net neutrality puts Pennsylvania at risk

The FCC's repeal means that there is no federal cop on the beat policing the broadband market. This puts Pennsylvania at risk, and the stakes are high.

First, the economy. Net neutrality is a vital tool for the Pennsylvania economy. It ensures that small businesses get a chance to compete on a level playing field. Without net neutrality, ISPs can favor certain companies or block competitors—or worse, prevent new companies from getting off the ground in the first place.

Net neutrality also ensures that the internet is a level playing field for marginalized Americans. Content creators, political activists, even Etsy retailers are all using the open internet to amplify voices that are often shut out of traditional platforms. The internet can be a democratizing force, but only if we protect it. Without net neutrality, ISPs are free to divide the internet into fast lanes for those who can afford it, and slow lanes for everyone else.

There are also many parts of Pennsylvania that still lack access to the internet. We need to be doing everything we can to get ISPs to expand their networks to these unserved communities. But the repeal of net neutrality has done the opposite—instead of investing in their networks, ISPs are now incentivized to extract new revenues from their existing customers.

Lastly, the repeal of net neutrality is a threat to public safety in Pennsylvania and across the country. Case in point: in 2018, just two months after the FCC repealed net neutrality, firefighters battling the largest wildfire in California's history realized that Verizon was throttling their communications equipment. In the past, the FCC might have adjudicated this dispute—but the agency had just revoked its authority, so it did nothing. We need the states to step in to fill this void, because when disaster strikes, firefighters should be battling flames, not their ISP.

III. SB 392, SB 393, and HB 544 are positive steps toward restoring net neutrality, but they need to be strengthened

Given these harms, it is commendable that the General Assembly is considering three bills to restore net neutrality. They include prohibitions on blocking, throttling, and paid prioritization—all of which OTI considers necessary for any net neutrality law. We also support giving enforcement powers to the Public Utility Commission. These bills are a step in the right direction, but they should be strengthened to close loopholes.

First, we learned at the federal level that any net neutrality regime must include a "general conduct rule" that is enforced by an expert agency. This is because ISPs are continually changing their tactics. 10 years ago blocking was a big concern; now it's zero-rating. We don't know what it will be 10 years from now, so we need an expert agency that is empowered to police new harms as they emerge.

Second, the bills should prohibit zero-rating. This practice is stealthy, in which ISPs claim to offer "free data" for favored content that won't count against your limit. Zero-rating creates precisely the kind of fast and slow lanes that we want to prevent. The real problem here are the data caps themselves—they are artificially low, designed to create scarcity where none exists, and should be investigated.

Third, the bills should prohibit access fees related to interconnection. Interconnection is a vital chokepoint in the internet's architecture that ISPs have exploited. For example, as I mentioned earlier, in 2014, ISPs degraded these chokepoints for months, slowing the connections of millions of Americans. It was all an effort to pressure companies into paying access fees, and consumers were just collateral damage. In 2018, California prohibited this kind

of access fee, and so should Pennsylvania. None of the bills currently do this, and it is a major loophole.

Lastly, the Assembly should consider defining "reasonable network management" and adding exceptions for public safety and copyright enforcement. Adding legislative findings and a severability clause might also strengthen the bills for judicial review.

With these changes, Pennsylvania could enact a strong law that restores net neutrality.

Conclusion

This issue is overwhelmingly popular. Millions of Americans wrote, emailed, and called the FCC to demand that they save net neutrality. So did thousands of online businesses, from small startups to large tech companies, and even many smaller ISPs and community networks that don't want to exploit their customers. The Trump FCC ignored all of this.

So if Pennsylvania passes a strong net neutrality law, you won't just be standing up for the internet; you'll be standing up for your constituents, for small businesses, for marginalized voices, for the economy, and for our democracy. We need the states to step in where the federal government has failed.

OPEN TECHNOLOGY INSTITUTE

Net Neutrality 2020

In 2015, after a decade of debate, information-gathering, and analysis, the Federal Communications Commission created strong federal rules to protect net neutrality. In 2017, new FCC leadership appointed by President Trump repealed those rules despite a massive public outcry.

State of Play

- Dozens of states, consumer groups, and tech companies are suing to overturn the FCC's repeal of net neutrality. In October 2019, a federal court partially upheld the FCC's order and struck down other parts. Multiple parties are appealing the ruling.
- Congress could restore net neutrality at any time by passing the *Save the Internet Act* (H.R. 1644), which would repeal the FCC's 2017 order and restore the 2015 rules. The bill passed the House in April 2019, but Sen. Mitch McConnell has blocked the bill in the Senate.
- State legislators have been given the green light to move forward with their own laws. Several states have already enacted laws—notably California, which passed a strong law in 2018.

The Benefits of Net Neutrality

- Net neutrality promotes economic growth and job creation. Net neutrality ensures that small businesses have a chance to compete on a level playing field.
- Net neutrality empowers marginalized voices that are often shut out of traditional platforms in media, political debate, and commerce.
- Net neutrality helps close the digital divide. Strong rules incentivize ISPs to invest in their networks and expand to unserved rural and urban areas.
- Net neutrality promotes public safety by protecting first responders who rely on communications equipment during disasters.

Elements of a Strong Law

- Any law must have bright-line rules that prohibit blocking, throttling, and paid prioritization.
- The law should also prohibit zero-rating, the misleading "free data" plans that effectively create online fast and slow lanes.
- Access fees should be banned and the bill should not contain any other loopholes related to interconnection.
- The law should include a "general conduct rule" that empowers an expert agency to address new net neutrality harms as they emerge.
- The law should carefully define "reasonable network management" to avoid loopholes.
- States should consider legislative findings, a severability clause, and invoke as many areas of state authority as possible to strengthen the law to judicial review.

For further information, contact OTI Senior Counsel Joshua Stager at stager@opentechinstitute.org

PRINTER'S NO. 535

THE GENERAL ASSEMBLY OF PENNSYLVANIA

HOUSE BILL

No. 544 Session of 2019

INTRODUCED BY FIEDLER, BRIGGS, SCHLOSSBERG, DONATUCCI, T. DAVIS, RABB, A. DAVIS, ULLMAN, MURT, INNAMORATO, SAMUELSON, FRANKEL, McNEILL, FREEMAN, HILL-EVANS, MILLARD, OTTEN, DeLUCA, DAWKINS, NEILSON, KINSEY, ROEBUCK, KENYATTA, SAPPEY, PASHINSKI, BIZZARRO, READSHAW, HOWARD AND SHUSTERMAN, FEBRUARY 19, 2019

REFERRED TO COMMITTEE ON CONSUMER AFFAIRS, FEBRUARY 19, 2019

AN ACT

Amending Title 66 (Public Utilities) of the Pennsylvania Consolidated Statutes, in general provisions, further providing for definitions; and providing for Internet neutrality.

The General Assembly of the Commonwealth of Pennsylvania hereby enacts as follows:

Section 1. Paragraph (1) of the definition of "public utility" in section 102 of Title 66 of the Pennsylvania Consolidated Statutes is amended to read:

§ 102. Definitions.

Subject to additional definitions contained in subsequent provisions of this part which are applicable to specific provisions of this part, the following words and phrases when used in this part shall have, unless the context clearly indicates otherwise, the meanings given to them in this section:

* * *

"Public utility."

(1) Any person or corporations now or hereafter owning or operating in this Commonwealth equipment or facilities for:

(i) Producing, generating, transmitting, distributing or furnishing natural or artificial gas, electricity, or steam for the production of light, heat, or power to or for the public for compensation.

(ii) Diverting, developing, pumping, impounding, distributing, or furnishing water to or for the public for compensation.

(iii) Transporting passengers or property as a common carrier.

(iv) Use as a canal, turnpike, tunnel, bridge, wharf, and the like for the public for compensation.

(v) Transporting or conveying natural or artificial gas, crude oil, gasoline, or petroleum products, materials for refrigeration, or oxygen or nitrogen, or other fluid substance, by pipeline or conduit, for the public for compensation.

(vi) Conveying or transmitting messages or communications, except as set forth in paragraph (2)(iv), by telephone or telegraph or domestic public land mobile radio service including, but not limited to, point-to-point microwave radio service for the public for compensation.

(vii) Wastewater collection, treatment, or disposal for the public for compensation.

(viii) Providing limousine service in a county of the second class pursuant to Subchapter B of Chapter 11 (relating to limousine service in counties of the second

class).

(ix) Providing persons with the ability to connect to the Internet through equipment that is located in this Commonwealth.

* * *

Section 2. Title 66 is amended by adding a chapter to read:

CHAPTER 30A

INTERNET NEUTRALITY

Sec.

§ 30A01. Definitions.

The following words and phrases when used in this chapter shall have the meanings given to them in this section unless the context clearly indicates otherwise:

"Broadband Internet access service." A mass-market retail service by wire or radio that provides the capability to transmit data to and receive data from all or substantially all Internet endpoints, including any capabilities that are incidental to and enable the operation of the communications service. The term does not include dial-up Internet access service.

"Edge provider." A person that provides any content, application or service over the Internet and any device used for accessing any content, application or service over the Internet.

"Internet service provider." A person that provides broadband Internet access service in this Commonwealth.

"Paid prioritization." The management of an Internet service provider's network to directly or indirectly favor some traffic over other traffic, including the use of techniques such as traffic shaping, prioritization, resource reservation or other forms of preferential traffic management in exchange for consideration, monetary or otherwise, from a third party or to benefit an affiliated person.

§ 30A02. Internet service providers.

An Internet service provider that provides broadband Internet access service may not engage in any of the following:

(1) Blocking lawful content, applications, services or nonharmful devices, subject to reasonable network management practices.

(2) Impairing or degrading lawful Internet traffic on the basis of Internet content, application or service, or use of a nonharmful device, subject to reasonable network management practices.

(3) Engaging in paid prioritization or providing preferential treatment of some Internet traffic to an Internet customer.

(4) Unreasonably interfering with or unreasonably disadvantaging either a customer's ability to select, access and use broadband Internet access service or lawful Internet content, applications, services or devices of the customer's choice, or an edge provider's ability to make lawful content, applications, services or devices available to a customer.

(5) Engaging in deceptive or misleading marketing practices that misrepresent the treatment of Internet traffic or content to its customers.

(6) Advertising, offering for sale or selling broadband

Internet access service without prominently disclosing with specificity all aspects of the service advertised, offered for sale or sold.

§ 30A03. Rules and regulations.

The Pennsylvania Public Utility Commission may promulgate rules and regulations necessary to administer and enforce this chapter.

§ 30A04. Violation of chapter.

(a) Unfair trade practice.--It shall be an unfair or deceptive act or practice and a violation of the act of December 17, 1968 (P.L.1224, No.387), known as the Unfair Trade Practices and Consumer Protection Law, to violate any provision of this chapter.

(b) Commonwealth agency contracts.--A Commonwealth agency may not enter into a contract with an Internet service provider found to be in violation of this chapter.

(c) Definition.--As used in this section, the term "Commonwealth agency" shall have the meaning given to it in 62 Pa.C.S. § 103 (relating to definitions).

§ 30A05. Applicability.

This chapter shall apply to contracts entered into on or after the effective date of this section.

Section 3. This act shall take effect in 60 days.

PRINTER'S NO. 412

THE GENERAL ASSEMBLY OF PENNSYLVANIA

SENATE BILL

No. 392 Session of 2019

INTRODUCED BY FARNESE, LEACH, TARTAGLIONE, HUGHES, COSTA, BREWSTER AND SCHWANK, MARCH 13, 2019

REFERRED TO CONSUMER PROTECTION AND PROFESSIONAL LICENSURE, MARCH 13, 2019

AN ACT

Providing for disclosure requirements for broadband Internet access service providers, for prohibitions and for contracts, grants and tax credits; and imposing civil penalties.

The General Assembly of the Commonwealth of Pennsylvania hereby enacts as follows:

Section 1. Short title.

This act shall be known and may be cited as the Open Internet Protection Act.

Section 2. Definitions.

The following words and phrases when used in this act shall have the meanings given to them in this section unless the context clearly indicates otherwise:

"Broadband Internet access service." As follows:

(1) The term includes any of the following:

(i) A mass-market retail service by wire or radio that provides the capability to transmit data to and receive data from all or substantially all Internet endpoints, including capabilities that are incidental to

and enable the operation of the communications service.

(ii) A service that the Federal Communications Commission determines to provide the functional equivalent of the service described under subparagraph (i) or used to evade the provisions of this act.

(2) The term does not include dial-up Internet access service.

"Commonwealth agency." As defined in 62 Pa.C.S. § 103 (relating to definitions).

"Edge provider." A person or entity that provides any of the following:

(1) Content, application or services over the Internet.

(2) A device used for accessing content, applications or services over the Internet.

"End user." A person or entity that uses a broadband Internet access service.

"Paid prioritization." The management of a provider's network to directly or indirectly favor some Internet traffic over other Internet traffic, including through the use of techniques such as Internet traffic shaping, prioritization, resource reservation or other forms of preferential Internet traffic management, in exchange for economic consideration from a third party or to benefit an affiliated entity.

"Provider." A person or entity that provides broadband Internet access service to end users in this Commonwealth.

"Reasonable network management." A practice that has a primarily technical network management justification and is primarily used for and tailored to achieve a legitimate network management purpose considering the particular network architecture and technology of the broadband Internet access

service. The term does not include other business practices.

Section 3. Disclosure requirements for providers.

A provider shall publicly disclose accurate information regarding network management practices, performance and commercial terms of the provider's broadband Internet access services to ensure the following:

(1) Consumers are able to make informed choices regarding use of the broadband Internet access services.

(2) Edge providers are able to develop, market and maintain content, applications and service offerings.

Section 4. Prohibitions on providers.

Except for the purpose of reasonable network management, a provider may not engage in any of the following acts:

(1) Blocking lawful content, applications, services or nonharmful devices.

(2) Impairing or degrading lawful Internet traffic on the basis of content, applications, services or use of nonharmful devices.

(3) Paid prioritization.

(4) Unreasonably interfering or disadvantaging the ability of an end user to select, access or use broadband Internet access service or lawful Internet content, applications, services or nonharmful devices of the end user's choice.

(5) Unreasonably interfering or disadvantaging the ability of a provider to make lawful Internet content, applications, services or nonharmful devices available to end users.

Section 5. Contracts, grants and tax credits for providers.

(a) Contracts and grants.--Notwithstanding any other

provision of law, a Commonwealth agency or political subdivision may not contract with or award grants or tax credits to a provider that fails to comply with this act.

(b) Applicability.--This section shall apply to contracts executed and grants and tax credits awarded on or after the effective date of this act.

Section 6. Civil penalties.

A provider that fails to comply with this act shall be in violation of the act of December 17, 1968 (P.L.1224, No.387), known as the Unfair Trade Practices and Consumer Protection Law.

Section 7. Effective date.

This act shall take effect in 60 days.

PRINTER'S NO. 413

THE GENERAL ASSEMBLY OF PENNSYLVANIA

SENATE BILL

No. 393 Session of 2019

INTRODUCED BY FARNESE, BREWSTER, TARTAGLIONE, COSTA, COLLETT, SCHWANK, BLAKE AND HUGHES, MARCH 13, 2019

REFERRED TO CONSUMER PROTECTION AND PROFESSIONAL LICENSURE, MARCH 13, 2019

AN ACT

Amending Title 66 (Public Utilities) of the Pennsylvania Consolidated Statutes, in general provisions, further providing for definitions; and providing for Internet neutrality.

The General Assembly of the Commonwealth of Pennsylvania hereby enacts as follows:

Section 1. Paragraph (1) of the definition of "public utility" in section 102 of Title 66 of the Pennsylvania Consolidated Statutes is amended to read:

§ 102. Definitions.

Subject to additional definitions contained in subsequent provisions of this part which are applicable to specific provisions of this part, the following words and phrases when used in this part shall have, unless the context clearly indicates otherwise, the meanings given to them in this section:

* * *

"Public utility."

(1) Any person or corporations now or hereafter owning

or operating in this Commonwealth equipment or facilities for:

(i) Producing, generating, transmitting, distributing or furnishing natural or artificial gas, electricity, or steam for the production of light, heat, or power to or for the public for compensation.

(ii) Diverting, developing, pumping, impounding, distributing, or furnishing water to or for the public for compensation.

(iii) Transporting passengers or property as a common carrier.

(iv) Use as a canal, turnpike, tunnel, bridge, wharf, and the like for the public for compensation.

(v) Transporting or conveying natural or artificial gas, crude oil, gasoline, or petroleum products, materials for refrigeration, or oxygen or nitrogen, or other fluid substance, by pipeline or conduit, for the public for compensation.

(vi) Conveying or transmitting messages or communications, except as set forth in paragraph (2)(iv), by telephone or telegraph or domestic public land mobile radio service including, but not limited to, point-to-point microwave radio service for the public for compensation.

(vii) Wastewater collection, treatment, or disposal for the public for compensation.

(viii) Providing limousine service in a county of the second class pursuant to Subchapter B of Chapter 11 (relating to limousine service in counties of the second class).

(ix) Providing persons with the ability to connect to the Internet through equipment that is located in this Commonwealth.

* * *

Section 2. Title 66 is amended by adding a chapter to read:

CHAPTER 30A

INTERNET NEUTRALITY

Sec.

§ 30A01. Definitions.

The following words and phrases when used in this chapter shall have the meanings given to them in this section unless the context clearly indicates otherwise:

"Broadband Internet access service." A mass-market retail service by wire or radio that provides the capability to transmit data to and receive data from all or substantially all Internet endpoints, including any capabilities that are incidental to and enable the operation of the communications service. The term does not include dial-up Internet access service.

"Edge provider." A person that provides any content, application or service over the Internet and any device used for accessing any content, application or service over the Internet.

"Internet service provider." A person that provides broadband Internet access service in this Commonwealth.

"Paid prioritization." The management of an Internet service

provider's network to directly or indirectly favor some traffic over other traffic, including the use of techniques such as traffic shaping, prioritization, resource reservation or other forms of preferential traffic management in exchange for consideration, monetary or otherwise, from a third party or to benefit an affiliated person.

§ 30A02. Internet service providers.

An Internet service provider that provides broadband Internet access service may not engage in any of the following:

(1) Blocking lawful content, applications, services or nonharmful devices, subject to reasonable network management practices.

(2) Impairing or degrading lawful Internet traffic on the basis of Internet content, application or service, or use of a nonharmful device, subject to reasonable network management practices.

(3) Engaging in paid prioritization or providing preferential treatment of some Internet traffic to an Internet customer.

(4) Unreasonably interfering with or unreasonably disadvantaging either a customer's ability to select, access and use broadband Internet access service or lawful Internet content, applications, services or devices of the customer's choice, or an edge provider's ability to make lawful content, applications, services or devices available to a customer.

(5) Engaging in deceptive or misleading marketing practices that misrepresent the treatment of Internet traffic or content to its customers.

(6) Advertising, offering for sale or selling broadband Internet access service without prominently disclosing with

specificity all aspects of the service advertised, offered for sale or sold.

§ 30A03. Rules and regulations.

The Pennsylvania Public Utility Commission may promulgate rules and regulations necessary to administer and enforce this chapter.

§ 30A04. Violation of chapter.

(a) Unfair trade practice.--It shall be an unfair or deceptive act or practice and a violation of the act of December 17, 1968 (P.L.1224, No.387), known as the Unfair Trade Practices and Consumer Protection Law, to violate any provision of this chapter.

(b) Commonwealth agency contracts.--A Commonwealth agency may not enter into a contract with an Internet service provider found to be in violation of this chapter.

(c) Definition.--As used in this section, the term "Commonwealth agency" shall have the meaning given to it in 62 Pa.C.S. § 103 (relating to definitions).

§ 30A05. Applicability.

This chapter shall apply to contracts entered into on or after the effective date of this section.

Section 3. This act shall take effect in 60 days.