

April 16, 2018

The Honorable Marsha Blackburn  
Chairman  
Subcommittee on Communications and Technology  
Committee on Energy and Commerce  
U.S. House of Representatives  
2266 Rayburn Building  
Washington D.C., 20515

The Honorable Michael Doyle  
Ranking Member  
Subcommittee on Communications and Technology  
Committee on Energy and Commerce  
239 Cannon House Office Building  
U.S. House of Representatives  
Washington D.C., 20515

**Re: Communications and Technology Subcommittee Hearing on April 17, 2018  
on Internet Prioritization**

Dear Chairman Blackburn and Ranking Member Doyle:

INCOMPAS, the internet and competitive networks association, supports the open internet protections that the Federal Communications Commission adopted in 2015. No blocking, no throttling, no paid prioritization, reasonable interconnection practices, and no unreasonable conduct that harms the openness of the internet are the cornerstones of net neutrality policy. Without *each* of these protections, the U.S. does not have an open internet, and consumers will pay more for slower networks and have less innovative online options available to them.

The Subcommittee's hearing on Tuesday presents an opportunity to further explore why preserving a free and open internet for American consumers is critical for the economy and is strongly supported by the American people. Indeed, last year during the FCC's proceeding, INCOMPAS conducted a survey of voters (see attachment) wherein 86% of all voters agreed that ISPs should treat all websites and content equally. Voters also understood that by repealing net neutrality, small businesses would be impacted. When asked if they would be concerned by ISPs discriminating against main street businesses, 79% of all voters were concerned. When asked if they "agree that small businesses like hardware stores and restaurants should have their websites run slower than bigger national chains that can afford to pay more for paid prioritization, or a fast lane," 72% of all voters disagreed. Consumers want to be able to access the content, services, and applications of their choice online without ISPs controlling their choices.

Once an end-user has chosen an ISP to connect to the internet, there is no alternative pathway for content and application providers to send requested traffic to that user. If paid prioritization is allowed, ISPs will be able to leverage their control over their networks and access to subscribers to allow some websites to be put in front of others at times of congestion. Paid prioritization, moreover, only has value if there is congestion. If capacity is abundant, prioritization has no value. If allowed to monetize congestion, ISPs will not be incented to upgrade their networks and invest in more bandwidth, and with the limited residential competition for ISP service—American consumers will be worse off.<sup>1</sup>

Unfortunately, there has been a conflation of paid prioritization, which encourages network congestion in order to monetize it, with reasonable network management, specialized services, and storage services, like Content Delivery Networks. Reasonable network management can involve unique routing of classes of traffic (but never particular services within a class) to improve the user experience. By definition, reasonable network management has technical, not commercial, motivations. Specialized services are not internet access services at all, but rather purpose-built applications of IP technology that are provided over ISP networks, such as IP television service, or dedicated telemedicine connections, that are outside the scope of net neutrality. Finally, CDNs minimize congestion so networks operate more efficiently for everyone. CDNs are not prioritization. They do not flag certain bits to move before or instead of others. Content delivery networks provide local storage for content closer to the end-user, so that there is less traffic flowing over backbone networks, allowing data to flow at its maximum capability. Content from CDNs go onto an ISP's network wherever, and at whatever rate, an ISP allows that content to enter its network. The way traffic enters an ISP's network is via ports that an ISP controls, this is the same for all CDNs, ISPs, and transit providers.<sup>2</sup> Moreover, the market for CDN services is incredibly competitive. There are dozens of CDN services competing against one another on price and service, ensuring that even the smallest websites are able to store content on a CDN.

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<sup>1</sup> Unfortunately, the majority of Americans only have one high-speed ISP choice at home, and two-thirds have, at best, a duopoly. However, a number of INCOMPAS members are small, competitive ISPs who are bringing new network options to ISP consumers at home. When our member companies enter, incumbent ISPs respond by investing more, increasing their speeds, and dropping their prices. *See* INCOMPAS Reply Comments, Dr. David Evans Analysis, at 35-37, *available at* <http://www.incompas.org/files/INCOMPAS%20RIF%20Reply%20Comments-30Aug%20FINAL.pdf>.

<sup>2</sup> Some have suggested that edge providers can gain an advantage via the volume of traffic and use of CDNs for better interconnection arrangements by pressuring network operators, presumably ISPs, to upgrade specific nodes. This is preposterous. ISPs control access to their own customers, as well the ability to reach the customers who are requesting the content. Edge providers and CDNs have an incentive to send the content requested via the network paths that allows for the customer to obtain it as their business models are dependent on serving traffic. As INCOMPAS has previously described, however, ISPs have used their market power and leverage to require edge providers to pay tolls in order to avoid blocking and throttling at interconnection. *See* INCOMPAS Letter, WC Docket No. 17-108 (Nov. 20, 2017) (*citing* the New York Attorney General among others who have found that large ISPs were deliberately not upgrading their interconnection infrastructure in order to extract payment—despite the fact that it affected the quality of service for consumers), *available at* [http://www.incompas.org/files/FINAL%20INCOMPAS%20Interconnection%20Ex%20Parte%2011\\_20\\_2017%201.pdf](http://www.incompas.org/files/FINAL%20INCOMPAS%20Interconnection%20Ex%20Parte%2011_20_2017%201.pdf).

The conflation of these distinct policies and features seems intended to disguise the key issue at stake: Allowing for paid prioritization online would tip the scales in favor of the largest companies with the deepest pockets, while punishing small businesses, non-profits, schools, churches, and entrepreneurs who are seeking to connect their new ideas, products, and services with the world—merely to award large ISPs with the control and ability to impose new tolls online. This would divide the internet into haves and have-nots and allow ISPs to profit off their ability to create and leverage congestion on their networks, resulting in ISPs picking the online winners and losers—rather than American consumers choosing which services and applications are the best. This is not consistent with the public interest and should continue to be banned.

There may be some cases where certain services require a guaranteed quality of service to preserve health or safety. For example, telemedicine or enabling autonomous driving only works if there is sufficient bandwidth and latency. In these cases, quality of service can be guaranteed by buying dedicated capacity to provision these services. The clear distinction between a specialized service and broadband internet access is that specialized services do not require connectivity to the broader internet. Put another way, two hospitals connected to each other in order to perform telesurgery will not need to check their email or watch a movie using that dedicated connection. Both the 2015 and 2010 rules have provided for the ability to sell and operate specialized services.<sup>3</sup>

As INCOMPAS has previously stated, we stand ready to assist the Congress in reinstating the FCC’s 2015 open internet policy which ensures that all Americans benefit from using the online content, services, and applications of their choice.

Sincerely,

*/s/Angie Kronenberg*

Angie Kronenberg  
Chief Advocate & General Counsel

Attachment

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<sup>3</sup> Nonetheless, INCOMPAS agrees with the open internet policy that ISPs’ internet access service should not be impeded, disrupted, or replaced by these services.

# imge.

insights

```
elif operation == "MIRROR_Y":  
    mirror_mod.use_x = False  
    mirror_mod.use_y = True  
    mirror_mod.use_z = False  
elif operation == "MIRROR_Z":  
    mirror_mod.use_x = False  
    mirror_mod.use_y = False  
    mirror_mod.use_z = True  
  
#selection at the end -add back t  
mirror_ob.select= 1  
modifier_ob.select=1  
bpy.context.scene.objects.active = mo  
print("Selected" + str(modifier_ob))  
#mirror_ob.select = 0  
done = bpy.context.selected_objects[0]
```

## OPEN INTERNET SURVEY

Key Findings

### **Methodology**

IMGE, a Republican consulting firm based in Alexandria, Virginia, conducted a national survey of 1,502 registered voters between June 26-29, 2017 using a mix of online and landline telephone interviews. The margin of error is 2.5%.

### **Majority support net neutrality**

*“Do you support or oppose net neutrality?”*

	All voters	Republicans	Trump voters
Support	50%	51%	48%
Oppose	16	15	17

### **Broad consensus the internet has improved under net neutrality**

*“Overall, do you think the internet has improved over the last few years?”*

	All voters	Republicans	Trump voters
Yes	70%	71%	70%
No	20	21	21

### **Overwhelming support for net neutrality rules**

*“Companies like Comcast, AT&T, Charter/Time Warner Cable, and Verizon provide home internet access. Today those internet service providers are prohibited from slowing or blocking websites or video services like Netflix. Do you agree that it is necessary for internet service providers to continue to follow these rules?”*

	All voters	Republicans	Trump voters
Agree	75%	72%	75%
Disagree	14	15	15

### **Voters like the internet the way it is under net neutrality**

*“Do you want the internet to be the internet or do you want the internet to be more like cable?”*

	All voters	Republicans	Trump voters
Be the internet	79%	76%	78%
More like cable	9	10	9

### **Agreement that internet service is a utility and should be regulated like one under net neutrality**

*“Now I’m going to ask you about a series of statements that have been made in the debate over net neutrality. After each statement, please tell me if you strongly agree, somewhat agree, somewhat disagree, strongly disagree or have no opinion...”*

*“Internet service is a necessity like water or power at your home.”*

	All voters	Republicans	Trump voters
Total Agree	71%	72%	69%
Total Disagree	23	24	25

*“Internet should be treated like any other utility such as gas or electric service.”*

	All voters	Republicans	Trump voters
Total Agree	53%	58%	58%
Total Disagree	30	28	28

**Near universal consensus in favor of principles of net neutrality**

*“People should be able to access any websites they want on the internet, without any blocking, slowing down, or throttling by their internet service provider.”*

	All voters	Republicans	Trump voters
Total Agree	87%	90%	88%
Total Disagree	6	6	7

*“Internet service providers should treat all websites and content equally.”*

	All voters	Republicans	Trump voters
Total Agree	86%	86%	86%
Total Disagree	7	9	9

**Voters reject changes to net neutrality that could empower the liberal media**

*“Companies that own cable news networks like CNN and MSNBC should be allowed to control your access to conservative websites.”*

	All voters	Republicans	Trump voters
Total Agree	12%	12%	14%
Total Disagree	79	83	82

**Republicans agree with President Trump’s position to block AT&T – Time Warner merger, break up Comcast**

*“President Trump said during the campaign that he would block the AT&T – Time Warner merger. Do you agree or disagree with the President’s position?”*

	All voters	Republicans	Trump voters
Agree	42%	57%	60%
Disagree	33	20	18

*“President Trump also said that we should ‘break up Comcast’. Do you agree or disagree with the President’s position?”*

	All voters	Republicans	Trump voters
Agree	33%	47%	50%
Disagree	41	26	22

**Voters concerned about how changes to net neutrality will impact small business**

*“More main street businesses are relying upon the internet to sell their services and goods. They typically have their own websites and use social media to advertise and boost their sales. How concerned would you be if companies like Comcast, AT&T and Verizon could discriminate against main street businesses on the internet?”*

	All voters	Republicans	Trump voters
Total Concerned	79%	79%	80%
Total Not Concerned	15	16	15

*“Do you agree that small businesses like local hardware stores and restaurants should have their websites run slower than bigger national chains that can afford to pay more for paid prioritization, or a fast lane?”*

	All voters	Republicans	Trump voters
Total Agree	19%	24%	27%
Total Disagree	72	67	66

**Voters strongly disapprove of ISP’s selling private data, browser history to advertisers**

*“Recently Congress voted to allow internet service providers like Comcast and AT&T to sell your private data and browser history to advertisers and other companies. Do you approve or disapprove of this action?”*

	All voters	Republicans	Trump voters
Total Approve	12%	15%	17%
Total Disapprove	83	81	80

*“Cable companies are looking to find new revenue sources. Would you support or oppose their selling your personal data and browser history to advertisers - which would allow cable companies to charge websites like Netflix and Twitter more for access to their networks?”*

	All voters	Republicans	Trump voters
Total Support	10%	12%	15%
Total Oppose	86	83	82