

Opening Statement of Chairman Greg Walden
Subcommittee on Communications and Technology
“From Core to Edge: Perspective on Internet Prioritization”
April 17, 2018

Good morning, and welcome to our witnesses.

The Energy and Commerce Committee has the broadest jurisdiction in all of Congress. And that jurisdiction includes one of the most important social and economic tools in the history of the world – the internet.

This subcommittee in particular has long led the way in exercising oversight over the internet.

As we will hear today, the internet looks nothing like it did when it was first fully commercialized in 1995. Back then, networks were in their nascent stage and network management presented a different set of problems. But today, with users sending over 100 exabytes of data per month, networks have had to continually adapt to manage congestion, and will need to do so even more adeptly and efficiently in the future.

The development of these networks, and their ability to handle the ever-growing traffic demands users place on them is truly an innovative feat. And not one that consumers often think about – because when you turn on your computer, or unlock your phone, the internet just works.

Because it appears so simple, it is easy for consumers to think about their internet connection as being managed by their Internet Service Provider, or ISP, from end to end. And for years, consumers were told the internet was an ‘information superhighway’ giving the false impression that all internet traffic is moving the same direction on an

equal plane at the same time. We even use the word ‘traffic’ to describe the movement of information and data across the internet – but it is actually a lot more complicated than that.

The internet isn’t a highway, where there can be so-called fast and slow lanes. The internet is actually a network of networks, with many layers managing the data that flows across it. There are application layers that establish the connection and encrypt data, there is the transport layer that prepares data for transport, and there is the network layer, which identifies the packet routing sequence.

Within these layers, there are many different players aside from your ISP involved in managing traffic. Devices, software, Wi-Fi routers, and content delivery networks, or CDNs, can all load, manage, and relay traffic in different ways.

We will hear from our witnesses today a more in-depth explanation of how the internet actually works – and the role prioritization plays in operating networks.

But in a basic sense, prioritization has nothing to do with traffic speed, rather it is putting certain bits over others to ensure that all packets arrive to their destination on time.

A complete ban on prioritization would not permit this and would not allow some services and applications to operate smoothly. In other words, prioritization currently exists across the internet architecture and is necessary to ensure the internet functions properly.

It is also worth nothing, that while we’ve heard a lot from our friends at the edge providers about how prioritization is bad for business, those operating at the edge pay to prioritize traffic every day through the use of various interconnection agreements, including CDNs.

In order to facilitate high demand applications like video streaming, many of the most popular content providers don't send data over the public internet, rather they directly interconnect with a CDN, allowing the edge provider's traffic to be prioritized to provide a better user experience. It is estimated that by 2021, CDNs will carry 71% of global internet traffic.

Today is not the first time this committee has considered how to best legislate the issue of prioritization. I released draft legislation last Congress that would establish rules of the road to ensure the internet remains open to all. Similarly, Chairman Blackburn introduced her Open Internet Preservation Act at the end of last year.

Rather than waste our efforts on partisan legislation like the CRA, we hope our colleagues on both sides will join our effort to develop legislation that will provide lasting solutions to some of the outstanding questions regarding internet traffic management.

What exactly do we mean and what harms are we trying to address in restricting internet prioritization, whether paid or unpaid, whether the content is affiliated or not?

I completely agree with Chairman Blackburn that in order to move forward toward a long overdue legislative solution, we need to be able to have this conversation, in a nuanced, in-depth manner, and figure out the common ground.

I look forward to hearing from all of our witnesses.