Harmful 5G Fast Lanes Are Coming. The FCC Needs to Stop Them

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The FCC is set to vote on April 25 to restore its authority over the companies we pay to get online, and reinstate federal net neutrality protections that were jettisoned by the Trump administration in 2017.

Net neutrality protections are supposed to ensure that we, not the internet service providers (ISPs) we pay to get online, get to decide what we do online.

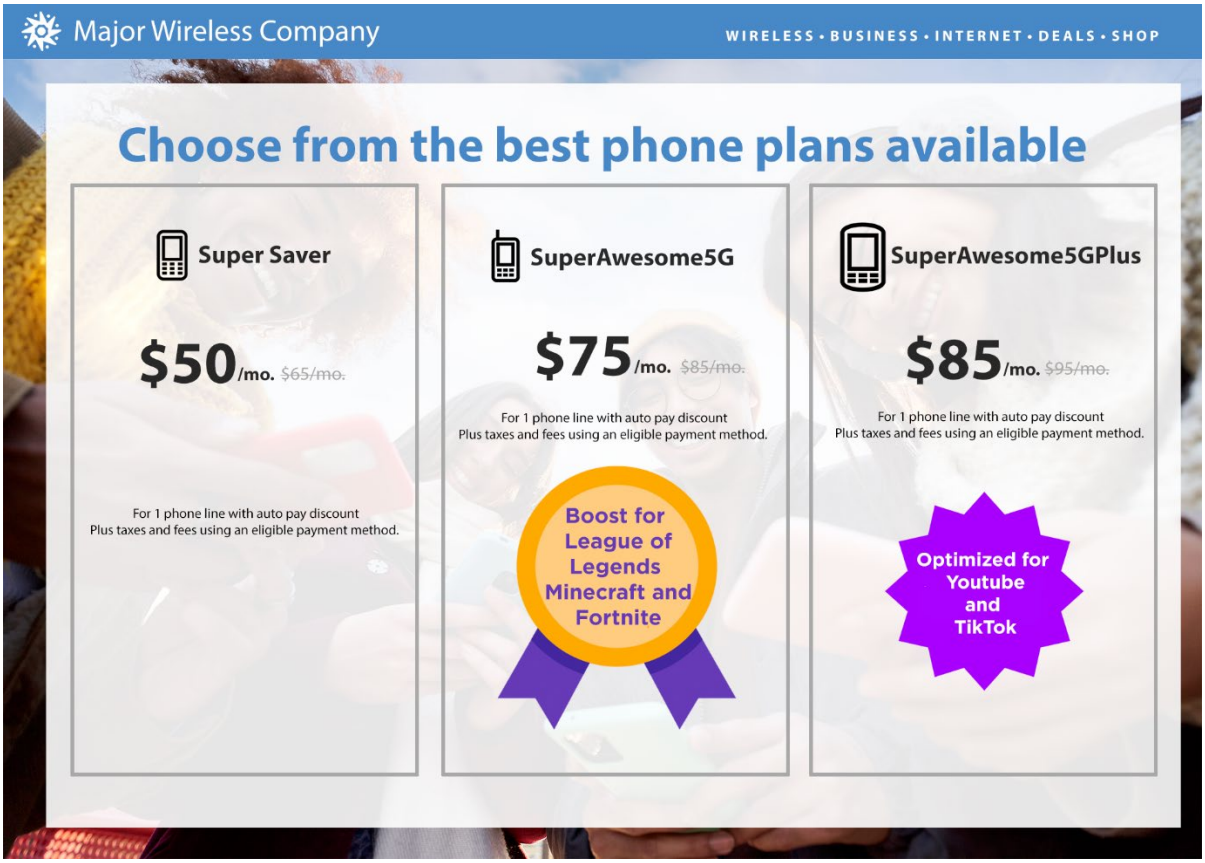
The FCC released its draft rules early in April and there's much to celebrate in them. Mobile carriers like T-Mobile, AT&T and Verizon that have been degrading video quality for mobile users will have to stop. The FCC kept in place state neutrality protections like California's net neutrality law, allowing for layers of enforcement. The FCC also made it harder for ISPs to evade net neutrality at the point where data enters their networks.

However, there's a huge problem: the proposed rules make it possible for mobile ISPs to start picking applications and putting them in a fast lane - where they'll perform better generally and much better if the network gets congested.

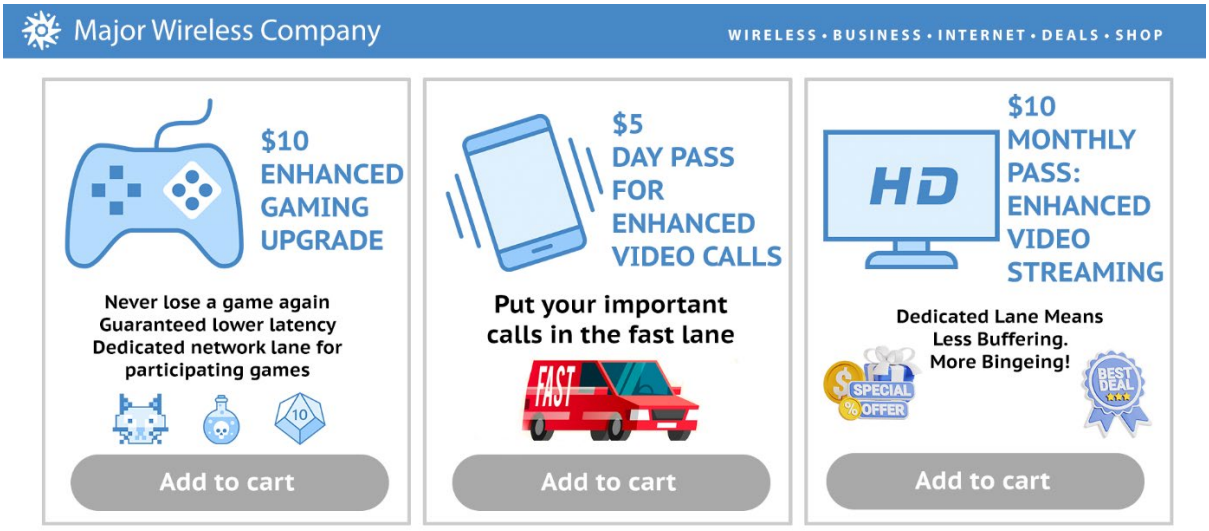
T-Mobile, AT&T and Verizon are all testing ways to create these 5G fast lanes for apps such as video conferencing, games, and video where the ISP chooses and controls what gets boosted. They use a technical feature in 5G called network slicing, where part of their radio spectrum gets used as a special lane for the chosen app or apps, separated from the usual internet traffic.

The FCC's draft order opens the door to these fast lanes, so long as the app provider isn't charged for them.

That means we could soon see fast lane offerings like this:



Or we could see add-ons like Enhanced Video Conferencing for $10 a month, or one-time 24-hour passes to have Prioritized Online Gaming.



This isn't imagination.

The ISPs write about this in their blogs and press releases. They talk about these efforts and dreams openly at conferences, and their equipment vendors plainly lay out how ISPs can chop up internet service into all manner of fast lanes.

These kinds of ISP-controlled fast lanes violate core net neutrality principles and would limit user choice, distort competition, hamper startups, and help cement platform dominance.

Net neutrality means that we, the people who use the internet, get to decide what we do online, without interference from ISPs. ISPs do not get to interfere with our choices by blocking, speeding up or slowing down apps or kinds of apps. Apps compete on a level playing field, and users, not ISPs, determine which apps are successful.

Letting ISPs decide which apps get to be in a fast lane violates these principles. Apps that are in a fast lane work better than those that are not, especially when the network is busy and apps in the regular lane start suffering. If HBO Max is in a fast lane, it will continue to work well even if the network is busy, while all other video is buffering.

Differences in performance, including relative differences in performance, matter. Even small differences in load times affect how long people stay on a site, how much they pay, and whether they'll come back. Those differences also affect how high up sites show in search results.

Thus, letting ISPs choose which apps get to be in a fast lane lets them, not users, pick winners and losers online.

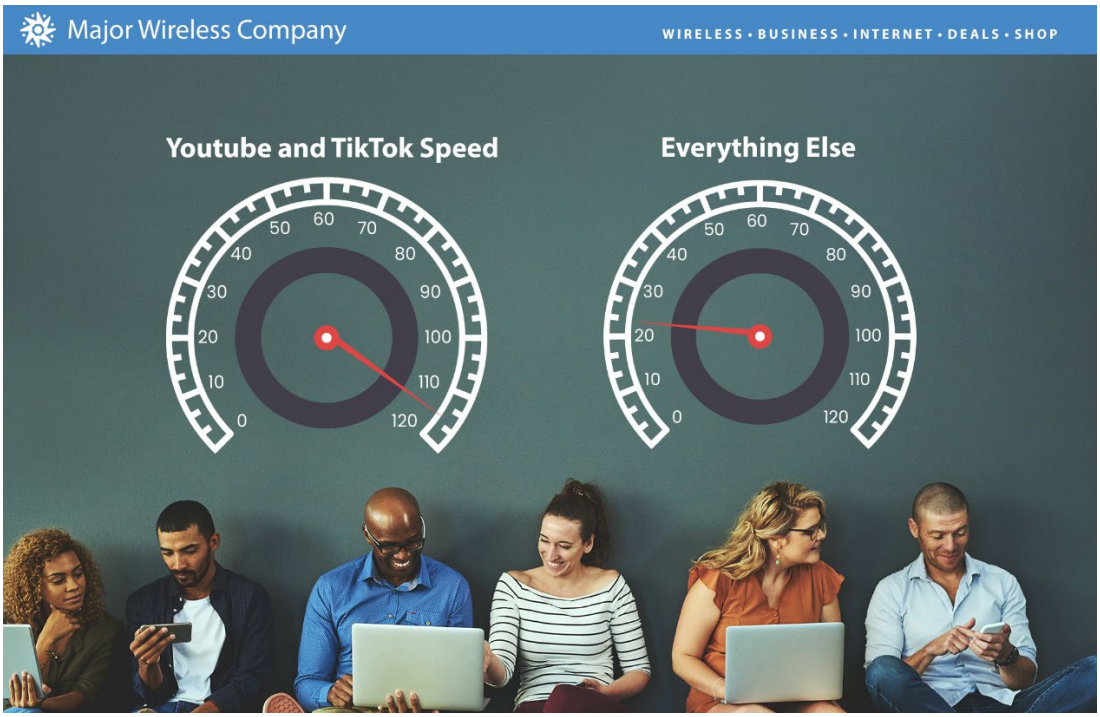
And as we've seen in the past, programs like this favor the most popular apps, even when the program is supposedly open to all apps in a category and no apps are paying the ISP. So the biggest apps will end up in all the fast lanes, while most others would be left out. The ones left out would likely include messaging apps like Signal, local news sites, decentralized Fediverse apps like Mastodon and PeerTube, niche video sites like Dropout, indie music sites like Bandcamp, and the millions of other sites and apps in the long tail.

Legislators, government agencies, attorneys general in states both red and blue, public interest groups, startups, and open-source technologists are all working to reduce the power and dominance of the biggest platforms. The FCC should be working to help that effort by creating a level playing field and banning these ISP-controlled 5G fast lanes.

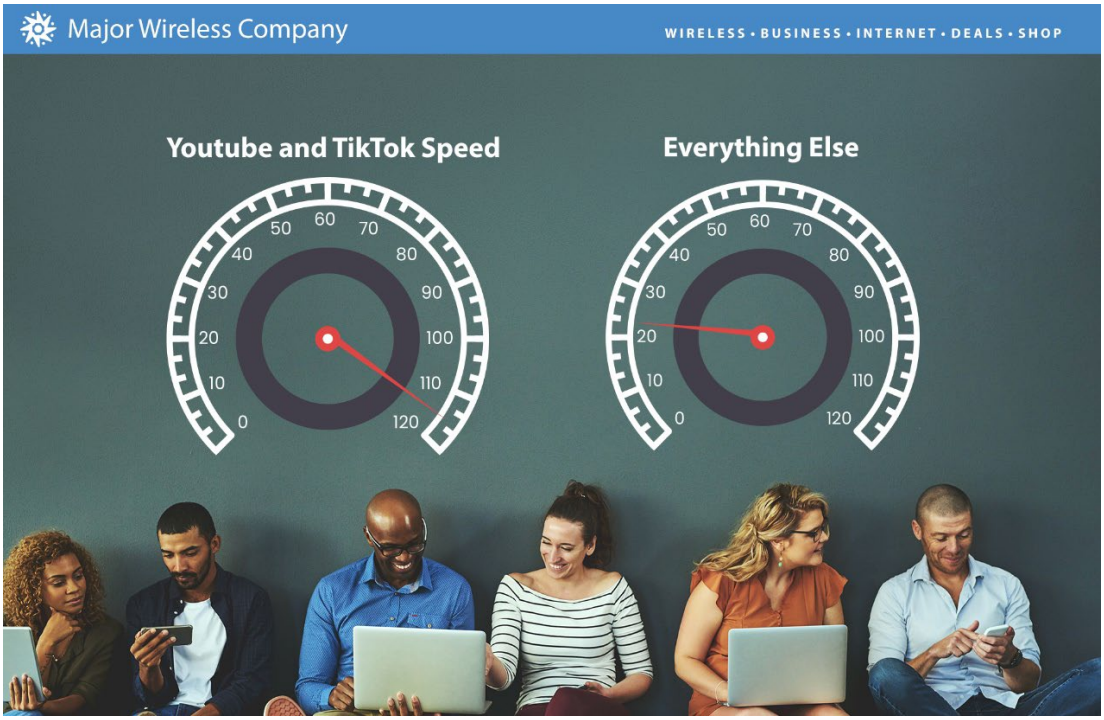
Meaningful net neutrality protections prohibit ISPs from speeding up and slowing down apps and kinds of apps.

ISPs can pick winners and losers by putting winners in a fast lane or losers in a slow lane.

This is a what it would look like if an ISP put everything except YouTube and TikTok in a slow lane.



This is what it would look like if an ISP put YouTube and TikTok in a fast lane.



It's the same picture. The effect is the same. In either case, disfavored apps will find it harder to compete.

Meaningful net neutrality protections need to protect against both.

This is not controversial.

President Obama's November 2014 net neutrality proposal included this protection:

"The rules I am asking for are simple, common-sense steps that reflect the Internet you and I use every day." That included, he said, a brightline ban on ISPs "intentionally slow[ing] down some content or speed[ing] up others — through a process often called "throttling" — based on the type of service or your ISP's preferences."

Even proposed Republican net neutrality bills prohibited ISPs from speeding up and slowing down apps and kinds of apps.

Many, including me, thought the 2015 Order did so, too.

Almost certainly, the millions of Americans who celebrated the 2015 Open Internet Order and fought the 2017 repeal think that net neutrality protections ban fast lanes and slow lanes.

The draft order takes a different approach.

The no-throttling rule that the FCC proposed in October explicitly prohibited ISPs from slowing down apps and classes of apps; it was silent on whether the rule also applies to speeding up.

Given the mobile ISPs' public statements about their plans for 5G fast lanes, public interest groups, startups, and members of Congress asked the FCC to clarify in the Order that the no-throttling rule also prohibits ISPs from speeding up apps and classes of apps.

The draft order did not do that.

While draft order acknowledges that some speeding up of apps could violate the no-throttling rule, it added some unclear, nebulous language suggesting that the FCC would review any fast lanes case-by-case, without explaining how it would do that.[1] This language gives the FCC maximum flexibility to accept or reject specific fast lanes in the future as it sees fit.

According to the draft order, the agency "could" find a violation of the no-throttling rule, if:

1. an ISP speeds up specific apps (but not necessarily classes of apps), and
2. the decision to speed up is "unreasonably discriminatory," and
3. the speeding up has the effect of "'impair[ing] or degrad[ing]' other … apps not given the same treatment."

In other words, the proposed no-throttling rule is a bright line rule for slow lanes – ISPs can't slow down apps or kinds of apps; but for fast lanes, it's a fuzzy, unclear case-by-case standard.

For example, would it be "unreasonably discriminatory" to create a 5G fast lane that includes the most popular apps in a category since it responds to consumer preferences? Does an unreasonably discriminatory fast lane need to technically degrade or impair the apps that are not in the fast lane for the FCC to find a violation of the no-throttling rule?

There is no way to predict which kinds of fast lanes the FCC might ultimately find to violate the no-throttling rule. This gives ISPs cover to flood the market with various fast-lane offerings, arguing that their version does not violate the no-throttling rule and daring the FCC to enforce its rule.

And if the mobile ISPs do this, the cable companies will soon follow. Cable companies have the tech to build their own fast lanes, and increasingly they compete with 5G to the Home services. If T-Mobile and Verizon start selling home plans that have "enhanced streaming video," you can bet the cable companies will launch their own version.

The FCC would then investigate these offerings case-by-case in lengthy and costly proceedings. In the meantime, apps that are not in the fast lane will suffer.

Entrepreneurs and application providers that are not included in a fast lane will have to decide whether to try to get into the fast lane, file an FCC complaint, or just silently suffer.

Companies that do file complaints will waste years litigating the meaning of "unreasonably discriminatory," all the while going up against giant telecoms that stockpile lawyers and lobbyists.

Unless you are a high-paid telecom lawyer who bills by the hour, the proposed test for what's a good or bad fast lane is a nightmare.

Not all 5G slices are harmful.

Just to be clear, net neutrality proponents are not asking the FCC to ban network slicing. There's lots of ways for ISPs to use slices for things that are not normal internet service such as a dedicated slice for a farming operation using remote controlled tractors, slices for telemetry data and oversight of autonomous cars, or providing a slice for a stadium's video system at a crowded game.

There are good reasons to isolate this kind of traffic, and it can be done without reducing user choice or tilting the online playing field. Under the FCC's draft order, such services would be so-called enterprise service offerings, to which the Open Internet protections don't apply.

But the 5G fast lanes ISPs are imagining for regular internet access – where ISPs decide which apps or kind of apps get a fast lane – would cause real harm and violate the core tenets of net neutrality.

We don't need our ISP deciding for us what's important and what's not; we want our ISP to let us decide and stick to the job of connecting our devices to the services we want to use.

It's not even clear why such fast lanes are necessary for consumer internet access. As one industry analyst noted, isn't 5G already supposed to be the fast lane for everything?

Luckily, there's still time to fix this.

The FCC can and should edit the draft order ahead of the vote on April 24 and clarify in the Order that the no-throttling rule also prohibits ISPs from creating fast lanes for select apps or kinds of apps.

The FCC just needs to put this fix in the fast lane to get it done before it votes on April 25.

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[1] 2024 Draft Order, para. 492 ("Our interpretation of "throttling" encompasses a wide variety of conduct that could impair or degrade an end user's ability to access content of their choosing; thus, we decline commenters' request to modify the rule to explicitly include positive and negative discrimination of content. We agree, however, with Free Press that a BIAS provider's "unreasonably discriminatory" decision to speed up specific content, applications, or services could "impair or degrade" other content, applications, or services not given the same treatment." (footnotes omitted)).