Paid Prioritization: The Antithesis of Openness on the Internet

Paid prioritization is a financial arrangement where a third-party content owner can pay an ISP to "cut to the front of the line" at congested nodes, or where an ISP engages in "vertical prioritization" by favoring its own content. To fully understand a future world of paid-prioritization, we must first understand a basic engineering reality:

- **By Definition, Prioritizing One Bit Slows Down All Other Bits:** Unlike paid prioritization in other markets such as physical parcel delivery, the routing of IP data is a zero-sum game. If a router speeds up one set of bits, by definition, all other bits are slowed down. Prioritization only has meaning during times when a network is experiencing congestion; otherwise the bits are routed in a first-in-first-out manner.

This engineering reality leads to basic economic realities that bound the practice of paid-prioritization:

- **ISPs Will Only Be Able to Form a Small Number of Paid-Priority Relationships:** Because of the negative impact on non-paid priority content, consumers will be less willing to pay for broadband service if an ISP prioritizes too much content, and an ISP's revenue gains from prioritization will not be enough to offset the losses stemming from user defection and devaluation. Also, the value of the prioritization to a third-party is directly proportional how much faster their content loads in comparison to non-prioritized content, but the more priority relationships an ISP has, the less this difference in load time. These factors create the reality that ISPs will only be able to prioritize a small amount of content, whether their own vertical content or the content of third parties.

- **The Revenue Potential from Third-Party Prioritization Is Low:** Unless network owners are blocking certain Web traffic outright, it isn't clear at all that content providers would be willing to pay for this form of accelerated delivery, when services like local caching (CDNs) are sufficient to deliver low-cost, quality streaming video. Today, this entire market for this "geographic prioritization" in the U.S. is less than one billion in annual revenues -- on the order of less than one-half of one percent of all current ISP annual revenues.

These economic bounds indicate just exactly what is motivating ISPs to so fiercely oppose restrictions on paid prioritization, and indicates an anti-competitive future if the Commission endorses the practice:

- **ISPs Will Use Vertical Prioritization to Preserve Legacy Voice, SMS and Video Revenues:** Because ISPs are bound by the laws of physics and supply and demand, they will not be able to generate substantial new revenue streams from paid-prioritization over the public Internet. But they will be able to use discriminatory prioritization to favor their own vertical content. The motivation for ISPs opposition to nondiscrimination is not the desire to earn new revenues, but to protect legacy voice, SMS and video revenues from the forces of competition enabled by the open Internet.

- **ISPs Will Form a Few Limited and Exclusive Third-Party Priority Relationships to Avoid Competition Through Product Differentiation:** ISPs will likely strike exclusive third-party priority relationships, but will not do so for the revenues they will generate, but because such exclusive deals will serve as a method of product differentiation. History has shown that such business strategies are often anti-consumer and anti-competitive, as they enable companies to avoid meaningful competition on their core access services.

- **Rules that Permit Paid Prioritization Will Harm Network Investment:** The benefits of prioritization to those paying for the preferential treatment are only realized during times of congestion. Therefore, ISPs will benefit from congestion in the network. This means that ISPs allowed to engage in paid-prioritization -- be it vertical or third party -- will have a substantial incentive to delay investment in order to profit from artificial scarcity.

- **Rules that Permit Paid Prioritization Will Harm Edge Investment:** The performance differential from paid- or vertical-prioritization would effectively subdivide the market for online applications and services. Apps and services offered without priority may not function well enough to serve as substitutes for many would-be users. This will crush edge investment and jeopardize the entire U.S. innovation economy.

The basic principle of open, nondiscriminatory interconnection is the DNA of two-way communications networks. Nondiscriminatory interconnection is why the Internet looks nothing like cable television, and is why the Internet has grown into an infrastructure that facilitates the truest expression of the free-market. This principle lies at the heart of the Communications Act because Congress rightly recognized that open, nondiscriminatory interconnection is a requirement for a successful communications infrastructure policy. Network Neutrality embodies this basic principle. Ultimately, the Commission has the responsibility to ensure that the content market that sits adjacent to the access market retains maximum competitiveness, as it always has, by precluding market power in network ownership from distorting the market for Internet content. This is the successful legacy of the *Computer Inquiries* that the Commission must uphold, even as it moves beyond these rules.

Paid prioritization is the antithesis to openness, and any regulatory framework that does not presume that such arrangements are harmful to consumers and competition is not real Net Neutrality -- it's fake Net Neutrality trying to pass as protections that will actually preserve the open Internet.