January 12, 2010

Julius Genachowski, Chairman
Federal Communications Commission
445 12th Street, SW
Washington, DC 20024

Dear Chairman Genachowski:

In my December 15th letter to you in this proceeding, I highlighted the October 21st letter from Senator Olympia Snowe, as well as the joint blog post by Lowell McAdam of Verizon Wireless and Eric Schmidt of Google, as a productive framework for discussion of issues raised in the Commission’s Preserving the Open Internet proceeding. As you know, Free Press immediately filed a response objecting to that framework, arguing that a standard based on “unreasonable discrimination” which Congress deemed strong enough to govern franchised monopoly telephone companies in 1934 and which has been applied to all telecommunications carriers for the past 75 years - is not “strict” enough to govern the Internet, because it is a “multi-purpose, multi-application network.” Free Press instead argued for a flat-out ban on all prioritization, and rejected the more flexible and nuanced Snowe framework that targets unreasonable and anticompetitive behavior that harms consumers. 1 Free Press, unfortunately, failed to explain why a stricter regulatory standard is needed in the dynamic, fast-evolving Internet market than what was needed to oversee a monopoly. This leap of illogic leaves us scratching our heads at how Free Press can so blithely ignore the realities of modern IP networks. In essence, they argue for a radical standard that would effectively mandate “dumb” rather than “smart” networks, inevitably resulting in stunted innovation, fewer consumer choices, and far less capable broadband networks across America.

First, as Commission staff explained at the September agenda meeting, a multi-purpose, multi-application network requires more flexibility than the traditional PSTN, not less, because different applications demand different levels of performance to function properly. For example, real-time VoIP and video applications are far more sensitive to network performance than non-real-time applications like email and Web browsing. Ironically, even Tim Wu, one of the principal proponents of net neutrality and the Chairman of Free Press’ board of directors, has stated that “an absolute ban on discrimination would be ridiculous.” 2 As he explained, “the Internet’s greatest deviation from network neutrality” has consisted of its traditional “favoritism of data applications, as a class, over latency-sensitive applications involving voice or video.” 3 Thus, in a very real sense, the absolute ban on quality of service (QoS) enhancements advocated by Free Press would actually enshrine discrimination in the FCC’s rules to the detriment, not

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1 See Free Press, Dismantling Digital Deregulation: Toward a National Broadband Strategy, at 76 (May 2009) (“No Internet packets should be given priority over others – whether the priority comes in the form of access, latency or bandwidth.”).


only of application and content providers that require higher QoS, but also the consumers who use, or would like to use, such applications and content.

Second, the absolute nondiscrimination requirement sought by Free Press would harm innovation and stifle investment in performance-sensitive IP applications and in network infrastructure, which could, in turn, negatively impact the development of all edge content and any applications which could require QoS, including telemedicine. Indeed, it would render unlawful a host of services offered today; services on which consumers and businesses have come to rely, as well as other services that could be offered in the near future that would provide significant benefits to customers. While AT&T will address this matter more fully in its Comments on the FCC's Open Internet NPRM, a few examples are:

- Internet Access with class of service capabilities. ISPs currently provide enterprise customers (including content and application providers) the option (for a fee) of separating their traffic into various classes of service, such as real-time, high-priority data, and best effort. In the event of congestion, more performance-sensitive data is prioritized both within the access routers shared with other enterprise customers and across the backbone routers that are shared amongst all Internet customers. Indeed, the priority markings of one customer may even be honored on the access links of other customers who also purchase this option.

- Edge caching. Some ISPs offer content and application providers the ability to cache content on servers located within the ISP network. Such content receives "enhanced" performance as compared to content hosted in more distant locations, but this enhancement is beneficial both to the content providers and the ISP's end users.

- Multicast. ISPs offer content providers the ability, for a fee, to multicast content to the ISPs' "eyeball" customers. Rather than sending a new, separate data transmission to each eyeball customer, which increases the content provider's costs and may cause congestion, multicasting enables the content provider to send a single data transmission to routers in the ISP's access network, which instantaneously replicate and route multiple copies of packets to the eyeball customers. Such a capability may be particularly valuable for popular content that many consumers are interested in viewing at the same time. Indeed, such a capability may be critical to the success of over-the-top HD video services (e.g., live sporting or political events). It is hard to imagine how a blanket prohibition on the sale of multicast capabilities by ISPs to content providers would promote the interests of consumers.

Perversely, the smallest application and content providers could be hurt the most by the radical nondiscrimination standard sought by Free Press. While some net neutrality advocates frequently espouse a utopian vision in which a small entrepreneur working in a garage or a college student working in her dorm room stands on equal footing with a Fortune 500 company, the nondiscrimination standard sought by Free Press would actually hurt smaller application and content providers vis-à-vis their larger competitors. That is because application or service-level performance may be greatly enhanced, not only by packet prioritization, but by reducing the distance that packets have to travel in an "unmanaged" state. Hence, those application and content providers with the resources to avail themselves of content-delivery networks (CDNs),
such as Akamai and Limelight, or to build their own CDN, as Google and others have done, enjoy enormous performance advantages over rivals without those resources. Absent a strict nondiscrimination requirement, as advocated by Free Press, broadband ISPs could offer content and application providers that lack those resources alternative ways of competing against their larger rivals.

The framework proposed by Sen. Snowe puts customers as well as web entrepreneurs front and center. By allowing infrastructure providers to innovate and create new services or network capabilities so long as consumers and competition are not harmed, ISPs can work with content owners and customers on their innovations to create the applications, products and content they want to deliver and which consumers will want to receive. Because the Snowe framework is flexible enough to accommodate commercial arrangements to provide specialized management to applications, games or content that requires QoS to function properly, it permits consumers to have greater control over their own Internet experience. For example, an edge content company providing real-time high definition content over the Internet might desire QoS to deliver a higher quality customer experience. It will then be up to consumers to decide whether and when to use that product and the QoS that enables it to work properly. On the other hand, the Free Press standard of strict non-discrimination and no prioritization would prevent the QoS needed to deliver the product as the content owner intended, and would thereby deprive the consumer of the higher quality experience they may desire. Surely it's better for the government to step back and let those offering or receiving the services decide rather than to take that choice out of their hands -- again, so long as consumers and competition are not harmed.

Allowing broadband ISPs to work with application and content providers to provide them the QoS needed to run their applications most efficiently would thus stimulate, not reduce, the development of new and innovative applications and content. Those new offerings, in turn, would spur more investment in broadband infrastructure. AT&T and other providers are building “smart” IP-based networks that would enable them to better and more efficiently accommodate all types of applications and content. We want to innovate by offering services that provide “edge” providers whatever capabilities their applications or content require and that our network can deliver. The more services we can sell to support that platform, the greater the potential reach of that network for consumers. And the better the network capabilities we can provide to edge providers, the greater the opportunity for innovation and creation of applications, services and content for consumers. In that sense, there truly could be a virtuous cycle of investment and innovation at all levels of the Internet -- edge, access and core -- which are mutually dependent on each other for their success.

Importantly, the more flexible approach espoused by Sen. Snowe and echoed by Google and Verizon Wireless is gaining momentum within the Internet ecosystem. In a recent FCC Workshop, Paul Misener of Amazon supported the commercial provision of such enhancements by broadband network operators to content and application providers. According to Misener, “it's always seemed to me that that [Paid QoS] would be appropriate so long as other customers of the network operator are not affected.” Such an approach was also endorsed recently by a spokesman for Microsoft who supported assurances “that network operators are able to offer last mile service enhancements and tiers of service, either to consumers or to online service

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providers...”5 That momentum is occurring because of the inherent logic to the Snowe framework which promotes innovation and investment throughout the Internet Ecosystem while at the same time protecting consumers and competition.

Conversely, the Free Press strict and absolute nondiscrimination standard would illogically short circuit that virtuous cycle of investment and innovation. If we cannot provide the network capabilities to make new applications work as intended, there will be less innovation at the edge and fewer services available to consumers. Dumbing down the commercially available capabilities of the network to the lowest common-denominator will hurt innovation and investment everywhere. Thus, contrary to Free Press’ claims, it seems clear that a rigid nondiscrimination standard that bans all forms of prioritization would arbitrarily cut off business models that are neither anticompetitive nor harmful to consumers. This is unwise on its face, and is simply not a standard formulated to promote the interests of consumers or content and application providers. Fortunately, though, alternative proposals are emerging and being embraced by major Internet players that can address the concerns we have cited while at the same time providing consumers with reassurance against potential abuses that could harm their interests. We urge the Commission to recognize and embrace this middle ground.

Very truly yours,

James W. Cicconi

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