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Comments to the Federal Communications Commission Regarding Broadband Industry Practices.

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**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)
)
Broadband Industry Practices) WC Docket No. 07-52
)

**COMMENTS OF
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I. Introduction

These comments are submitted in response to the Federal Communications Commission’s Notice of Inquiry on Broadband Industry Practices adopted March 22, 2007.² The Commission is asking for information on the operation of broadband markets, whether broadband providers engage in practices that might be considered “discriminatory”, how consumers might be affected by such practices, and, most importantly, whether the available evidence supports any regulatory intervention.

The regulatory intervention at issue in this proceeding is whether to adopt a mandatory “net neutrality” policy—i.e., to subject broadband providers to some sort of open access requirement. Open access is almost always a major issue where network industries are concerned. Such requirements may yield some

¹ The Progress & Freedom Foundation is a private, non-profit, non-partisan research institution established to study the digital revolution and its implications for public policy. These comments reflect the views of the author and not necessarily those of the Foundation, its staff or directors.

² These comments draw heavily from a paper coauthored with David Scheffman: Lenard, Thomas M. and David T. Scheffman. 2006. “Distribution, Vertical Integration and the Net Neutrality Debate,” in *Net Neutrality or Net Neutering: Should Broadband Internet Services Be Regulated?* Thomas M. Lenard and Randolph J. May eds. Springer and The Progress & Freedom Foundation, pp. 1-24.

benefits when abuse of market power is harming consumers, but these requirements impose major costs as well. The network sharing requirements the Commission adopted subsequent to the 1996 Telecom Act are a prime example of the costs these regulations can impose. Like today's net neutrality proposals, those network sharing rules ("unbundling requirements" in that case) mandated how firms could use infrastructure built by other companies. Research overwhelmingly finds that these rules reduced investment in critical infrastructure.³ Despite that costly experience, similar unbundling requirements are still being discussed today in connection with net neutrality.⁴

Broadband penetration has increased rapidly in recent years, with over 64 million high-speed lines connecting homes and businesses to the Internet as of the middle of 2006.⁵ Despite this high penetration, broadband is still at an early stage in its development. The "promise of broadband" is continuously being redefined and what it will look like in future years is still relatively unknown. Broadband providers, content providers and technology companies are all placing expensive and risky bets on new technologies and business models and will be doing so for many years to come.

The regulatory environment affects incentives to make these investments and implement business models that could be successful and beneficial to consumers. The danger is that we will adopt a net neutrality regime that inhibits

³ See Wallsten, Scott. May 2007. "Towards Effective U.S. Broadband Policies," The Progress & Freedom Foundation; and Eisenach, Jeffrey A. and Thomas M. Lenard. 2003. "Telecom Deregulation and the Economy: The Impact of UNE-P on Jobs, Investment and Growth," The Progress & Freedom Foundation.

⁴ Some so-called consumer groups have been advocating a return to these policies. See discussion in Wallsten (2007), p. 10.

⁵ See Federal Communications Commission. January 2007. "High-Speed Services for Internet Access: Status as of June 30, 2006."

investment in broadband, deters entry by new competitors, and limits the content available. Such an outcome would harm consumers.

II. The broadband business

The Commission should keep in mind three critical characteristics of broadband when considering the questions it is asking in this inquiry. First, as indicated above, the broadband business is still quite new and is changing rapidly. It would be difficult to devise a regulatory policy that improves the operation of markets in such a dynamic environment. Second, broadband is a distribution business. It is unclear what business models will eventually succeed, but arrangements that might be viewed as not neutral or discriminatory are common in distribution businesses, as they are in many competitive markets. Finally, broadband, and often the content it delivers, are capital-intensive businesses with large upfront costs and low marginal costs of serving additional customers. In these situations, the economically efficient way of covering costs is through some form of price discrimination.

The typical supermarket—a distribution business—does not have market power. Nonetheless the typical supermarket engages in practices that, from a regulatory perspective, might be characterized as discriminatory. For example, supermarkets typically charge manufacturers for shelf space, in fees commonly called “slotting allowances.” Supermarkets also receive various forms of incentives for special displays in prominent locations (e.g., end-aisle and checkout areas). Other sorts of deals and promotional allowances influence the

allocation of shelf space. Of course, another important determinant of shelf placement is how much a product will sell and the profit derived from the sale.

These practices are part of the system by which a competitive marketplace allocates scarcity—e.g., shelf space and the consumer’s attention span. We see an analogous competitive process in Internet commerce—e.g., payments for first screen preferences, payments for buttons and pop-ups. Such payments represent competition for access to potential customers, roughly analogous to payments for shelf space, shelf placement and special displays.

Consumer goods are primarily purchased from retailers. When consumers purchase products from retailers, they are purchasing the products and the distribution services bundled together. Since most consumer goods are bundled with distribution, we would expect that at least some viable Internet business models will require broadband to be bundled with content. A successful business model may entail a bundled product offering that is sufficiently attractive for consumers to become subscribers at prices that support the large infrastructure investments that are required. The bundled product offering is going to have to be put together and sold by the broadband provider. This may involve broadband providers creating more content than they currently do, and it probably will require various contractual arrangements with content creators and providers. Indeed, vertical integration into programming was a key element in the development of cable television. The cable providers were able to develop sufficiently attractive bundles of carriage and content to drive increases in

subscribership. If cable had been subject to an open access requirement, its development would have been hindered.⁶

There may be other analogies to cable television. We may well see different tiers of service—a “basic” broadband service with sufficiently attractive bundled content to drive basic broadband subscribership, and additional “premium” content that only a subset of subscribers will purchase.

Some version of this scenario underlies the concerns of the net neutrality proponents. Specifically, the prospect of broadband providers becoming significant content providers raises concerns that they will favor their own content.

However, while bundled broadband/content packages may be needed to drive increases in subscribership, consumers will also demand broad access to the Internet. It is common for vendors that sell consumer goods and services directly to consumers to sell their own products and services along with those of other vendors. (Again, supermarkets, which offer store brands and name brands, are an obvious example.) Competitors’ content can increase subscribership at a very low (or zero) marginal cost. So it is unlikely to be in a broadband provider’s interest to block content that consumers want.

Both the broadband distribution infrastructure and often the content it delivers are businesses with large up-front costs and low marginal costs of serving additional customers. Marginal cost pricing is not viable in industries with this cost structure, because it cannot generate sufficient revenues to cover the total costs of the enterprise. It is well known to economists that the efficient way

⁶ See Owen, Bruce M. and Gregory L. Rosston. 2006. “Local Broadband Access: *Primum Non Nocere or Primum Processi?* A Property Rights Approach,” in Lenard and May (2006), pp. 163-194.

to cover these costs is through price discrimination—“Ramsey pricing”, in which the contribution to fixed costs is inversely related to the elasticity of demand. In these situations, “non-neutral” (i.e., discriminatory) business models are not only efficient, but sometimes the only way to generate sufficient revenues to cover the large costs of these investments. Prohibiting non-neutral business models will generally harm consumers because goods that consumers are willing to pay for may not be produced.

Finally, there is the issue of capacity constraints. When the network is congested, charging for access is efficient and therefore welfare-enhancing. It allocates the available capacity to those who value it most. It also provides a signal that attracts additional investment. Such efficient pricing might, however, also appear discriminatory from a regulatory perspective, despite its benefits.

III. Competition and Entry

At the present time, even with a small number of competitors, competition in the market for high-speed lines is quite intense. According to the most recent FCC data, the number of high-speed lines grew by over 50 percent from June 2005 to June 2006. Providers are rapidly rolling out new infrastructure and upgrading existing infrastructure. New technologies are coming on line. The number of fiber subscribers, while still small, is growing at well over 100 percent per year. The number of mobile wireless high speed lines increased by about ~~2,800 percent~~ between June 2005 and June 2006. The latest FCC data indicate

there are more than 11 million mobile wireless high-speed lines and that they account for 17 percent of high-speed lines.⁷

However, even if broadband were a monopoly, the case for net neutrality regulation would still be tenuous. Economists have shown that under a fairly broad set of circumstances, it will not be in a monopolist's interest to try to monopolize an adjacent market and exclude competitors' applications, because it already can charge the monopoly price for the platform, and blocking applications will reduce what it can charge. As Farrell and Weiser explain, "even a monopolist has incentives to provide access to its platform when it is efficient to do so, and to deny such access only when access is inefficient."⁸

There are some exceptions to this rule. For example, a competitor in the adjacent market can threaten the primary monopoly. Net neutrality proponents sometimes argue that broadband providers dominant in the video or voice markets might discriminate against independent voice or video over IP. Such anticompetitive behavior could potentially occur, but the risk would seem to be low when there is some competition, as there is in most broadband markets. In the event anticompetitive behavior does occur and consumers are harmed, antitrust remedies are available on a case-by-case basis.

New entrants into broadband delivery don't have any primary monopoly to protect. Bundling voice or video or some other application with broadband may be the only strategy that makes entry feasible. For example, Clearwire, a new

⁷ These data are from Federal Communications Commission. January 2007. "High-Speed Services for Internet Access: Status as of June 30, 2006."

⁸ Farrell, Joseph and Philip J. Weiser. 2003. "Modularity, Vertical Integration, and Open Access Policies: Toward a Convergence of Antitrust and Regulation in the Internet Age," *Harvard Journal of Law and Technology*. 17:1, pp. 85-135.

entrant using wireless technology, entered into an exclusive deal with Bell Canada to provide VoIP services in exchange for a \$100-million investment. A net neutrality requirement might preclude such a deal and could deter a company like Clearwire from entering the market as a new platform to compete with the incumbent telecom and cable providers. It certainly could make such entry more difficult.

IV. Effect on Innovation

Net neutrality proponents argue that compromising the Internet's "end-to-end principle" would harm innovation, which they maintain occurs at the edges of the network. But there is a striking lack of concern about the effect net neutrality regulation would have on incentives to invest and innovate in the network itself—where broadband providers already are spending tens of billions of dollars.

Net neutrality advocates raise the specter that broadband providers would block applications and content innovators in order to get their own new products to consumers, thereby discouraging innovation. It is difficult to envision such an outcome happening in the current broadband environment. First, there is intense competition in most local markets even when there are only two providers. A provider who denies access to content or applications that consumers value will reduce the demand for its services and increase the demand for its competitors' offerings. In addition, the market for a lot of content and applications is not the local broadband market—it is national, or even international, in scope. This means there are a lot of potential outlets for content and applications and that it

would be difficult to prevent consumers from receiving innovations that are valuable to them.⁹

V. Conclusion

The net neutrality debate is about creating a system with appropriate incentives to invest and innovate, both in the network itself and in content and applications, in order to deliver to consumers the new services they want and for which they are willing to pay. Both sides in the net neutrality debate base their arguments on the need to foster investment and innovation. Proponents of open access are concerned that broadband providers have market power, which they can use to discriminate against content providers. But there is no evidence that this is currently a problem. In fact, the Commission points out in its notice that no evidence of discrimination was presented in the recent proceedings involving wireline mergers.¹⁰ It makes no sense to be concerned with hypothetical market power issues when it is not yet clear what viable business models for broadband will look like and whether providers will be able to recoup the large sums being invested.

The burden of proof for regulatory intervention of the type that net neutrality proponents advocate is high. In order for regulation to be justified, there should be reliable evidence of a significant market failure, as well as a demonstration that the benefits of any proposed regulation will outweigh the

⁹ See Yoo, Christopher. 2006. "Network Neutrality and Competition Policy," in Lenard and May (2006), pp. 36-38.

¹⁰ Federal Communications Commission. April 16, 2007. "In the Matter of Broadband Industry Practices" Notice of Inquiry. WC Docket No. 07-52, p. 2.

costs. In general, it will be much better to apply a case-by-case approach to alleged abuses, to attempt to sort out those cases that truly are anti-competitive and detrimental to consumers, and to then devise appropriate remedies. This is the approach that antitrust analysis takes.¹¹

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¹¹ This is also the approach in The Progress & Freedom Foundation. 2005. "Digital Age Communications Act (DACA) Proposal of the Regulatory Framework Working Group, Release 1.0." <http://www.pff.org/issues-pubs/other/050617regframework.pdf>