Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of	)	
	)	
Broadband Industry Practices	)	WC Docket No. 07-52
	)	
Vuze, Inc. Petition for Rulemaking to Establish Rules Governing Network Management Practices By Broadband Network Operators	)	WC Docket No. 07-52
	)	
Free Press et al. Petition for Declaratory Ruling	)	CC Docket No. 02-33 et al.

To: The Commission

REPLY COMMENTS OF THE TELECOMMUNICATIONS INDUSTRY ASSOCIATION

The Telecommunications Industry Association ("TIA") submits these reply comments in response to comments addressing the Petition for Declaratory Ruling and Petition for Rulemaking filed by Free Press *et al.* ("Free Press") and Vuze, Inc. ("Vuze").[1] In its opening comments, TIA argued that the Commission should (1) continue to rely on its *Internet Policy Statement* in evaluating broadband providers' behavior, addressing claims of harm on a case-by case-basis; (2) recognize that robust network management is essential in today's broadband market; and (3) ensure that broadband consumers receive meaningful information regarding the details of their service plans. As described below, each of these claims finds extremely broad

[1] *Petition of Free Press, et al. for Declaratory Ruling that Degrading an Internet Application Violates the FCC's Internet Policy Statement and Does Not Meet an Exception for 'Reasonable Network Management'*, WC Docket No. 07-52, Petition (filed Nov. 1, 2007) ("*Free Press Petition*"); *Vuze, Inc. Petition for Rulemaking to Establish Rules Governing Network Management Practices By Broadband Network Operators*, WC Docket No. 07-52, Petition (filed Nov. 14, 2007) ("*Vuze Petition*").

support in the record compiled. TIA takes this opportunity to make two additional points in response to the filed comments. First, even if the Commission believes that the blocking or affirmative degradation of traffic based on the source of that traffic (as opposed to the needs of the network) is occurring and is contrary to the public interest, it should not take action that would prohibit the *prioritization* of traffic based on its source. Such prioritization is often procompetitive and benefits consumers. Second, TIA agrees with suggestions that the technical issues raised in this docket would best be addressed in cooperative industry meetings, rather than in a Commission proceeding. TIA has extensive experience in industry standard-setting activities, and believes that these collaborative processes offer substantial benefits over top-down rulemaking.

I. OTHER COMMENTERS STRONGLY SUPPORT EACH OF THE THREE POINTS MADE IN TIA'S OPENING COMMENTS.

As explained in its initial comments, TIA represents the producers of broadband networks, services, and devices, and as such its interests in this proceeding closely align with those of consumers. Specifically, TIA and its members benefit from policies that promote investment in intelligent next-generation broadband networks using multiple competing technological platforms. Only policies of this sort can ensure that consumers continue to enjoy the benefits of infrastructure deployment and intermodal competition that have resulted in today's vibrant telecommunications market. In its opening comments in this docket, TIA made three central points designed to ensure that any Commission action in this docket remain faithful to its successful pro-deployment framework. TIA reiterates these points here, and notes that they each garnered substantial support from a broad collection of commenting parties.

First, the Commission should continue to abide by the principles set forth by its *Internet Policy Statement*.[2] As TIA noted in its opening comments, it has supported those principles for almost five years, both as a member of the High-Tech Broadband Coalition ("HTBC") and on its own.[3] Virtually all other commenters agree that the *Policy Statement*'s principles should play a key role in broadband policy going forward, and that the Commission can if necessary take action, on a case-by-case basis, to safeguard individuals' access to content and applications.[4]

Second, modern broadband networks require intensive network management. Absent such management, the use of high-bandwidth applications such as VoIP, streaming video, video conferencing, and gaming would be constrained or infeasible, particularly as peer-to-peer applications consumed increasing portions of available network resources. Here, too, the record reflects nearly uniform assent.[5] For this reason, a large and varied assortment of commenters agree that the Commission should reject calls for bright-line rules that would "lock in" current assumptions, and should instead pursue a flexible case-by-case approach that gives due consideration to the benefits of a particular management practice.[6] TIA agrees that

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[2] *See Appropriate Framework for Broadband Access to the Internet Over Wireline Facilities*, Policy Statement, 20 FCC Rcd 14986 (2005) ("*Internet Policy Statement*").

[3] *See* TIA NOI Comments at 10-11; TIA Opening Comments at 4-5. *See also* HTBC filings in CS Docket No. 02-52; GN Docket No. 00-185; CC Docket Nos. 02-33, 95-20 & 98-10.

[4] *See, e.g.*, AT&T Comments at 3; Embarq Comments at 4-5; Fiber-to-the-Home Council Comments at 34; Free State Foundation Comments at 7-8; Hands Off the Internet Comments at 7-9.

[5] *See, e.g.*, AT&T Comments at 6-11; Verizon Comments at 28-34; Time Warner Comments at 9-14; Fiber-to-the-Home Council Comments at 10-11; CTIA Comments at 13-16; Free State Foundation Comments at 4-5; Progress and Freedom Foundation Comments at 3-4.

[6] *See, e.g.*, AT&T Comments at 24-27; Fiber-to-the-Home Council Comments at 33-34; Qwest Comments at 3; Verizon Comments at 5-6; Embarq Comments at 4-5; Time Warner Comments at 1-2; Comcast Comments at 8-10; Frontier Comments at 8; Global Crossing Comments at 2-4; Independent Telephone and Telecommunications Alliance Comments at 1-2; CTIA Comments at 16-17; National Cable & Telecommunications Association Comments at 2-3; Free State Foundation Comments at 6-8; Health Tech Strategies Comments at 2; Institute for Policy Innovation Comments at 3; LARIAT
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anticompetitive policies should be prevented (and punished), but emphasizes that many allegedly discriminatory policies are in fact grounded in sound network management practice.

Third, TIA reiterates its view that the Commission should ensure that broadband providers supply their customers and prospective customers with meaningful information regarding their service plans. Current disclosure practices are uneven and often insufficient. Consumers must have meaningful information regarding aspects of their plan, including upstream and downstream throughput speeds, bandwidth usage limitations, the use of technologies designed to block spam, viruses, or other content deemed to be harmful, and any other limitations associated with a particular service plan. The provision of such meaningful information regarding broadband service plans will allow consumers to make informed decisions among competing providers and will enable the Commission to rely on the market in the first instance, rather than on heavy-handed regulation, to address claims of misconduct. This proposition, too, has received extensive support in the instant record.[7]

II. THE COMMISSION SHOULD NOT PROHIBIT A PROVIDER'S ABILITY TO PRIORITIZE CONTENT BASED ON ITS SOURCE.

Various commenters argue that while network management techniques designed to conserve capacity are appropriate and valuable, the Commission should prohibit anticompetitive

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Comments at 2; National Black Chamber of Commerce Comments at 1; National Grange Comments at 2; Small Business and Entrepreneurship Council Comments at 2.

[7] *See, e.g.*, American Homeowners Grassroots Alliance Comments at 3; AT&T Comments at 32-34; Computer & Communications Industry Association ("CCIA") Comments at 6; Distributed Computing Industry Association Comments at 8; Labor Council for Latin American Development Comments at 1-2; National Association of State Utility Consumer Advocates ("NASUCA") Comments at 7-8; National Telecommunications Cooperative Association Comments at 7-8; OASIS Institute Comments at 1-2; Open Internet Coalition Comments at 11; Progress & Freedom Foundation Comments at 11; Verizon Comments at 15-18.

actions that block or affirmatively degrade[8] certain content or applications based on the identity of the underlying provider rather than based on the needs of the network.[9] TIA agrees that allegations of such blocking or degradation should be monitored. However, many preferences based on the source of particular content or applications will be procompetitive, and should be permitted.

If demonstrated, blocking or degradation practices based on the source of particular content rather than based on the needs of the network do raise concerns. In some cases, this sort of behavior will be found to be acceptable upon inspection: For example, a "family-friendly" ISP will of course block most or all content from certain providers, and such blocking generally will not be deemed to be anticompetitive. In other cases, though, source-based blocking will raise deeper concern: A cable provider that permits users to access its own video content online but prohibits access to unaffiliated providers' video, for example, might well warrant scrutiny akin to that faced by local exchange carrier Madison River when that company was accused of blocking Vonage's VoIP offering.

Critically, though, there is a world of difference between action taken to block or affirmatively degrade content based on the provider's identity, on the one hand, and action taken to *accelerate* some traffic based on the identity of the source of the content, on the other. While the former might in some cases be anticompetitive, the latter will very frequently be pro-consumer. As TIA noted in response to the NOI in this docket, "[b]roadband Internet access

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[8] As explained in TIA's opening comments, prioritizing one traffic stream could in some cases (but often will not) have the effect of "deprioritizing" another traffic stream. TIA distinguishes here between this type of deprioritization and intentional, or "affirmative," actions taken by a provider to degrade particular traffic.

[9] *See, e.g.*, Vonage Comments at 8; CCIA Comments at 5; NASUCA Comments at 6-7.

service providers may consider entering into commercially negotiated agreements with content providers to ensure [quality of service] for those content providers' higher-capacity applications, such as voice and high-quality video applications such as Internet Protocol Television (IPTV)."[10] For example, a facilities-based ISP might contract with a specific voice, video, public health, or other provider to ensure uninterrupted packet flow for that provider in return for payment. This sort of deal will benefit consumers in multiple ways. First, of course, it will enable consumers to obtain the service being offered, which otherwise might not be available at all, or not available in the form consumers most demand. For example, such arrangements may be the only way to ensure that latency-sensitive applications are provisioned in a manner acceptable to consumers. Second, the arrangement will properly allocate the service's costs: Without such "fast-lane" access, the content provider could only offer the service at issue by enhancing capacity throughout the network. This solution would be inefficient (because much of the additional capacity would go unused) and would place costs on all users. When the ISP and the provider enter into a separate deal for prioritized access, though, the additional costs are passed on to the specific users relying content provider's offering. Third, these arrangements will promote build-out that might not otherwise occur. A provider that could not expect to recoup capital expenditures if those costs were spread across its entire subscriber base *will* be able to justify investment when it knows that such investment will be recaptured from a discrete group of customers contractually obligated to pay premiums for use of the new capacity. Following

[10] TIA NOI Comments at 7.

deployment, the broadband provider will likely find new and more efficient uses for the new facilities, benefiting ordinary consumers.[11]

In their zeal to preclude source-of-content-based blocking, however, several commenters fail to draw the distinctions necessary to permit fast-lane agreements such as those described above. CCIA, for example, claims that once providers are permitted to categorize traffic based on content, "not only will rampant violations of the FCC *Policy Statement* and end user rights proliferate, but private censorship of the public Internet then looms right around the corner."[12] These parties urge the Commission to reject *any* distinctions based on the identity of the content or application provider.

The Commission should reject such efforts to dispose of the baby with the proverbial bathwater. "Fast-lane" agreements such as those described above benefit consumers. Heavy-handed rules would lump such agreements in with more questionable practices would wreak real and significant harm. As TIA explained in response to the NOI in this docket:

> Rigid imposition of regulations that would require network operators to treat all packets the same without regard to the sender of the traffic, however, could frustrate the introduction of such new and innovative services. This is not only because the network operator might be unable to guarantee the necessary QoS, but also because it could undermine its incentive to deploy next-generation communications infrastructure in the first place, due to uncertain return on that investment.[13]

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[11] In addition, arrangements such as these will have only negligible effects on other users in the short run. Their own content will not be blocked or affirmatively degraded; in most cases, their traffic will not be slowed at all. Even in the most extreme cases – in which usage is approaching the network's peak capacity – the result is likely to be limited to a fraction-of-a-second delay in delivery of an e-mail message.

[12] CCIA Comments at 5. *See also* NASUCA Comments at 6-7 ("[T]he Commission needs to adopt rules to ensure that "network management" does not become censorship, or blocking, or other activities by network operators that are not in the public interest.").

[13] TIA NOI Comments at 7.

In short, the prioritization of content originating with a particular source is *not* equivalent to the blocking or affirmative degradation of content originating with a particular source, and any framework established by the Commission to evaluate claims of discrimination with regard to Internet content must recognize the distinction.

III. THE TECHNICAL DISPUTES AT THE HEART OF THIS PROCEEDING SHOULD BE ADDRESSED VIA COLLABORATIVE INDUSTRY PROCEEDINGS.

Finally, many of the issues raised in this docket would best be resolved through cooperative industry-wide processes. As TIA's own experience demonstrates, such collaborative processes can be tremendously productive in addressing technical matters such as those presented here. TIA commends the Commission for initiating such a process through its en banc hearing on broadband network practices on February 25, 2008 in Cambridge, MA. The hearing specifically addressed the issues raised by the Vuze and Free Press petitions, from both policy and technical perspectives, establishing an archetype for future discussions.

As highlighted above, the record reveals overwhelming agreement on the necessity of robust network-management practices. Thus, claims that a provider has violated the *Policy Statement* are likely to turn on fact-specific questions regarding the precise value of specific practices and the precise costs imposed by those practices – in other words, whether the network management practice at issue is "reasonable." These questions, in turn, will raise additional questions of a highly technical nature: What is the specific capacity of the network at the last mile? In all relevant points in the backbone? How fully is such capacity being utilized at different times of day, on different days of the week? What is the best way to protect latency- and jitter-sensitive traffic while minimizing any harm to other traffic? Which traffic warrants special treatment, and when? What factors should be considered in prioritizing traffic? These questions, as some commenters point out, are not amenable to resolution in the context of a

Commission proceeding. They are principally dynamic questions of technology, not of policy, and their answers are likely to change over time as technology evolves. As such, they are best addressed in the course of collaborative industry-wide proceedings featuring deliberation among engineers rather than debate among lawyers.[14]

TIA has extensive experience in industry-wide standard-setting activities, and thus can speak to the benefits of collaborative industry processes. TIA is accredited by the American National Standards Institute ("ANSI") to develop voluntary industry standards for a wide variety of telecommunications products – a role it has played for 20 years. In connection with this responsibility, TIA's Standards and Technology Department sponsors more than 70 standards-setting groups. More than 1,000 individuals, including representatives from manufacturers, service providers, end-users, and the government, serve on the groups involved in these standard-setting activities. TIA also participates in international standards-setting bodies, such as the International Telecommunication Union, the Inter-American Telecommunication Commission and the International Electrotechnical Commission.

In short, TIA has a long history of facilitating and participating in self-regulatory industry initiatives. This history has demonstrated to TIA and its members that collaborative self-regulation is often far superior to the top-down imposition of technical mandates. Such cooperative efforts facilitate meaningful dialogue and deliberation informed by technological realities rather than political rhetoric. Very often, they result in consensus-based solutions that benefit all affected parties. Before adopting any new requirements in response to the Vuze and

[14] *See, e.g.,* AT&T Comments at 16-17 (citing industry-wide working group working to develop an "efficient, network-aware peer-to-peer technology").

Free Press petitions, the Commission should carefully consider the value of continuing cooperative industry processes.

CONCLUSION

For the reasons described above and in TIA's opening comments, the Commission should deny the Free Press and Vuze petitions.

Respectfully submitted,

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February 28, 2008