COALITION OF BROADBAND USERS AND INNOVATORS

July 17, 2003

FILED ELECTRONICALLY

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: CS Docket No. 02-52; CC Docket Nos. 02-33, 98-10 & 95-20; GN Docket No. 00-185
***Ex Parte* Submission**

Dear Ms. Dortch:

The Coalition of Broadband Users and Innovators, which represents twenty-five premier online content companies, consumer groups, and CE manufacturers—the leading companies investing in online content—for the past several months has shared with the Commission its concern that consumers in the broadband era continue to have the ability to reach their choice of lawful Internet content, applications, and services and to attach any nonharmful devices to the network absent interference from or impairment by network operators. The Coalition has urged the Commission to preserve in the broadband context the rules that have guided Internet use in the dial-up world: in essence, a requirement that consumers have unfettered access and that network operators not interfere and not unreasonably discriminate. To that end, the Coalition has urged the Commission to put in place reasonable, targeted safeguards to ensure that this principle of network neutrality that has been instrumental to the growth and development of the Internet in the narrowband world extends to broadband. At bottom, consumers should not have fewer choices of content and services in the broadband world than they have come to expect from narrowband.[1]

Opposition to this principle of unfettered access in the broadband context has focused on whether broadband network operators today are acting in a discriminatory manner to impair consumer access on or to the Internet. The Coalition has demonstrated that network

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[1] Consumer expectations with respect to the ability to "go anywhere" on the Internet have been set in the narrowband context, where the Internet grew and developed over the last decade. As the *Washington Post* explained, "Imagine the outcry if a local phone company started preventing customers from calling Lands' End to place an order and redirected their calls to L.L. Bean, which had paid the phone company to be the exclusive purveyor of down jackets to its customers." S. Pearlstein, *Policy Watch*, Wash. Post, Nov. 24, 2002, at H3.

operators have both the *ability*, via current technology, and the *incentive*, because they provide both the broadband pipe and Internet content, to impair consumer access to the Internet.[2] As for ability, the record is clear. As the Commission recognized in the *Cable Modem Notice*: "[I]t is technically feasible for a cable operator to deny access to unaffiliated content or to relegate unaffiliated content to the 'slow lane' of its residential high-speed Internet access service."[3] Moreover, the Coalition, as well as the High Tech Broadband Coalition, has laid out several examples of discriminatory acts, including restrictions in cable operators' subscriber agreements that prohibited the establishment of virtual private networks, visiting certain gaming or other websites, or using consumer-selected devices.[4] With respect to telcos, examples of impairment are not plentiful because there are rules in place that protect consumer access to content and their ability to connect nonharmful devices to the wireline broadband network. The Coalition is concerned, however, about continued access in the absence of such rules. Furthermore, while network operators have stated that they do not presently impair user access, they refuse to commit to not doing so in the future—which is particularly troubling because they are least likely to engage in discriminatory behavior now, while these rulemakings are pending.

The suggestion that the Commission cannot adopt safeguards absent a present showing of harm is unusual, if not novel, given that the mission of the agency is to use its expertise to adopt rules and regulations in the public interest that among other things "promote the continued development of the Internet."[5] The Commission does not have to wait for harm to occur before acting, and it is well-settled that it may "plan in advance of foreseeable events instead of waiting to react to them."[6] The Commission is a policymaking entity with an eye on

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[2] *See, e.g.*, Letter From Gerard J. Waldron, Counsel to the Coalition of Broadband Users and Innovators, to Chairman Michael Powell, Federal Communications Commission, in CS Docket No. 02-52; GN Docket No. 00-185; CC Docket Nos. 02-33, 95-20 & 98-10, at 1 (Jul. 7, 2003).

[3] *In re* Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities; Internet Over Cable Declaratory Ruling; Appropriate Regulatory Treatment for Broadband Access to the Internet Over Cable Facilities, *Declaratory Ruling and Notice of Proposed Rulemaking*, 17 FCC Rcd 4798, 4845 (2002) ("*Cable Modem Notice*").

[4] *See* Notice of *Ex Parte* Presentation of the Coalition of Broadband Users and Innovators in CS Docket No. 02-52; GN Docket No. 00-185; CC Docket Nos. 02-33, 95-20 & 98-10, Attachment at 5 (Mar. 31, 2003); Notice of *Ex Parte* Presentation of the Coalition of Broadband Users and Innovators in CS Docket No. 02-52 and GN Docket No. 00-185, at 1 (Mar. 27, 2003); Notice of *Ex Parte* Presentation of the Coalition of Broadband Users and Innovators in CS Docket No. 02-52; GN Docket No. 00-185; CC Docket Nos. 02-33, 95-20 & 98-10, at 2 (Mar. 4, 2003); Letter From Gerard J. Waldron, Counsel to the Coalition of Broadband Users and Innovators, to Chairman Michael K. Powell, *et al.*, Federal Communications Commission, in CS Docket No. 02-52; CC Docket Nos. 02-33, 98-10 & 95-20; GN Docket No. 00-185, at 4 (Jan. 8, 2003); Comments of the High Tech Broadband Coalition in CS Docket No. 02-52, at 10-13 (June 17, 2002) ("HTBC Comments").

[5] 47 U.S.C. § 230(b)(1).

[6] United States v. Southwestern Cable Co., 392 U.S. 157, 177 (1968); *see also* NARUC v. FCC, 525 F.2d 630, 638 n.37 (D.C. Cir. 1976) (quoting NBC v. United States, 319 U.S. 190, 219 (1943)) ("The substantial discretion generally allowed the FCC in determining both what and how it can properly (continued...)

the future, rather than an enforcement agency that focuses on past behavior. Thus, unlike the Justice Department, the Commission adopts policies to shape future behavior rather than simply imposing penalties for past actions. There is a long history, from the inclusion of Sections 201 and 202 in the 1934 Communications Act[7] to *Carterfone*[8] to the *Computer Inquiries*[9] to the

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regulate, is often attributed to the highly complex and rapidly expanding nature of communications technology."); *In re* Application of EchoStar Communications Corporation, (a Nevada Corporation), General Motors Corporation, and Hughes Electronics Corporation (Delaware Corporations) (Transferors) and EchoStar Communications Corporation (a Delaware Corporation) (Transferee), *Hearing Designation Order*, 17 FCC Rcd 20559, 20598 (2002) ("*EchoStar/DirecTV Order*") (noting the Commission's "long-standing policy of promoting competition in the delivery of spectrum-based communications services and . . . implement[ing] numerous measures to foster entry and ensure availability of competitive choices in the provisioning of such services").

[7] *See* Act of June 19, 1934, c. 652, Title II, § 201(b), 48 Stat. 1064, 1070 (codified as amended at 47 U.S.C. § 201(b)) (making unlawful any "charge, practice, classification, or regulation [by a common carrier] that is unjust or unreasonable"); Act of June 19, 1934, c. 652, Title II, § 202(a), 48 Stat. 1064, 1070 (codified as amended at 47 U.S.C. § 202(a)) (prohibiting common carriers from "mak[ing] any unjust or unreasonable discrimination in charges, practices, classifications, regulations, facilities, or services for or in connection with like communication service, . . . or mak[ing] or giv[ing] any undue or unreasonable preference or advantage to any particular person, class of persons, or locality, or to subject any particular person, class of persons, or locality to any undue or unreasonable prejudice or disadvantage").

[8] *See In re* Use of the Carterfone Device in Message Toll Telephone Service; *In re* Thomas F. Carter and Carter Electronics Corp., Dallas, Tex. (Complainants), v. American Telephone and Telegraph Co., Associated Bell System Companies, Southwestern Bell Telephone Co., and General Telephone Co. of the Southwest (Defendants), *Decision*, 13 FCC 2d 420, 423 (1968) (finding unreasonable a tariff that "prohibits the use of interconnecting devices which do not adversely affect the telephone system") ("*Carterfone*"), *recon. denied*, 14 FCC 2d 571 (1968). In the earlier *Hush-A-Phone* decision, the D.C. Circuit struck down a tariff prohibiting foreign attachments that caused no harm to the network. *See* Hush-A-Phone Corp. v. United States, 238 F.2d 266, 269 (1956) (upholding "the telephone subscriber's right reasonably to use the telephone in ways which are privately beneficial without being publicly detrimental"), *on remand*, *In re* Hush-A-Phone Corp. and Harry C. Tuttle, Complainants v. American Telephone & Telegraph Co., *et al.*, Defendants, *Decision and Order on Remand*, 22 FCC 112, 113 (1957) ("[A] tariff regulation which amounts to a blanket prohibition upon the customer's use of any and all devices without discriminating between the harmful and harmless encroaches upon the right of the user to make reasonable use of the facilities furnished by the defendants.").

[9] *See In re* Regulatory and Policy Problems Presented by the Interdependence of Computer and Communication Services and Facilities, *Final Decision and Order*, 28 FCC 2d 267, 284 (1970) (requiring common carriers to offer data processing services only through a separate affiliate and to treat affiliated and unaffiliated data processing providers equally) ("*Computer I*"); *In re* Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry), *Final Decision*, 77 FCC 2d 384, 419-20 (1980) (deregulating computer-enhanced services while continuing to regulate "basic" telecommunications services provided by common carriers) ("*Computer II*"); *In re Computer III* Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review – Review of *Computer III* and ONA Safeguards and Requirements, *Further Notice of Proposed Rulemaking*, 13 FCC Rcd 6040, 6114 (1998) (replacing the *Computer I* separate affiliate (continued...)

adoption of navigation device requirements,[10] of the Commission's acting, frequently in a forward-looking manner, to preserve principles of network neutrality. This deep-rooted legacy will be lost if the Commission fails in the above-captioned proceedings to embrace past precedent that ensures the ability of consumers freely to use and navigate the network. Moreover, taking appropriate, targeted steps in these proceedings will advance the important national goal of ensuring the ubiquitous availability of broadband.[11]

This *ex parte* submission first documents the long and well-established history of Congress and the Commission taking action when faced with the prospect of future harm to consumers. Both Congress and the Commission have frequently adopted measures to curb potential threats by entities with the *incentive* and *opportunity* to act in an anti-consumer and discriminatory fashion. The filing next cites to the Commission's own finding that the technology exists to enable network operators to discriminate and then outlines current discriminatory or potentially discriminatory practices of broadband network operators. Finally, this submission suggests a targeted safeguard that the Commission could adopt to ensure that consumer access to the Internet remains free and unfettered in the broadband era. This simple proposal would create regulatory certainty by extending the well-established principle of network neutrality to broadband, thereby benefiting consumers, as well as Internet content and service providers. Such a provision could sunset when more vigorous competition emerges in the market for the delivery of broadband services.

I.

Historically, Congress and the Commission have not hesitated to step in to protect the interests of consumers by acting in anticipation of future bad behavior by entities in a position to act contrary to the public interest. They have done this even in the absence of specific evidence of current bad acts. Both Congress and the Commission have recognized that

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requirement with a series of nonstructural safeguards intended to prevent cross-subsidization through cost accounting measures, prevent discriminatory network interconnection or access practices, and regulate joint marketing practices by protecting consumer proprietary network information so that common carriers could offer enhanced services on an integrated basis).

[10] *See In re* Implementation of Section 304 of the Telecommunications Act of 1996: Commercial Availability of Navigation Devices, *Report and Order*, 13 FCC Rcd 14775 (1998) ("*Navigation Devices Order*").

[11] *See Cable Modem Notice*, 17 FCC Rcd at 4801 ("[C]onsistent with statutory mandates, the Commission's primary policy goal is to 'encourage the ubiquitous availability of broadband to all Americans.'") (quoting *In re* Appropriate Framework for Broadband Access to the Internet Over Wireline Facilities, Universal Service Obligations of Broadband Providers, Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review—Review of Computer III and ONA Safeguards and Requirements, *Notice of Proposed Rulemaking*, 17 FCC Rcd 3019, 3021 (2002) ("*Wireline Broadband Notice*"); Michael K. Powell, Remarks at the National Summit on Broadband Deployment 1 (Oct. 25, 2001) (available at http://www.fcc.gov/Speeches/Powell/2001/spmkp110.pdf) (describing broadband deployment as "the central communications policy objective in America").

preventive measures accomplish more than attempting to roll back the clock once harm already has occurred. The broadband arena should be no different. Among the litany of past examples of forward-looking Commission and Congressional action are:

Program Access: Congress and the FCC—recognizing a consistent national policy in favor of ensuring the availability to the public of information from a multiplicity of sources—have been forced to mandate that the cable industry refrain from denying access to or discriminating against providers on its network and that it not hinder its competitors' ability to offer competing service. During consideration of the 1992 Cable Act, Congress was concerned that cable operators were using their control of cable infrastructure to stymie new entrants to the cable programming market and exclude unaffiliated cable programmers.[12] To end these practices, Congress enacted a provision intended to prevent a vertically-integrated cable operator/programming provider from hindering an unaffiliated cable operator or DBS provider's ability to offer programming to its subscribers.[13] Congress directed the FCC to adopt rules to implement this program access principle and also instructed that the regulations sunset after ten years, unless the FCC determined that they continued to be necessary to preserve competition and diversity in the video programming marketplace.[14] Last year, the FCC decided to extend these rules for an additional five years, finding them "necessary to preserve and protect competition and diversity in the distribution of video programming."[15]

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[12] *See* Cable Television Consumer Protection and Competition Act of 1992, Pub. L. No. 102-385, § 2(a)(5), 106 Stat. 1460, 1462 (1992) ("1992 Cable Act") ("The cable industry has become vertically integrated; cable operators and cable programmers often have common ownership. As a result, cable operators have the incentive and ability to favor their affiliated programmers. This could make it more difficult for noncable-affiliated programmers to secure carriage on cable systems."); H. Rep. No. 102-628, at 27 (1992) ("1992 Cable Act House Report") ("In order to stem and reduce the potential for abusive or anticompetitive actions against programming entities, the legislation prohibits multichannel video programming distributors . . . from discriminating against non-affiliated cable programming services with respect to terms and conditions of carriage."); S. Rep. No. 102-92, at 26 (1992) ("1992 Cable Act Senate Report") ("[V]ertically integrated cable programmers have the incentive and ability to favor cable operators over other video distribution technologies through more favorable prices and terms. Alternatively, these cable programmers may simply refuse to sell to potential competitors. Small cable operators, satellite dish owners, and wireless cable operators complain that they are denied access to, or charged more for, programming than large, vertically integrated cable operators.").

[13] *See* 1992 Cable Act § 19 (codified at 47 U.S.C. § 548).

[14] *See id.* (codified at 47 U.S.C. § 548(c)).

[15] *In re* Implementation of the Cable Television Consumer Protection and Competition Act of 1992; Development of Competition and Diversity in Video Programming Distribution: Section 628(c)(5) of the Communications Act; Sunset of Exclusive Contract Provision, *Report and Order*, 17 FCC Rcd 12124, 12124 (2002) (quoting 47 U.S.C. § 548(c)(5)).

On what basis did the Commission Act? Evidence of harm? No. The Commission extended its program access rules based on the *incentive* and *ability* for cable operators to discriminate, not on evidence of existing discriminatory behavior.[16]

The Computer Inquiries: The Commission has long been concerned about a service provider in one market leveraging its market position into a related market. In 1966, the Commission began examining the emerging intersection of telecommunications and computers to address the issue of whether to regulate nascent data processing services as part of the existing telecommunications infrastructure. The Commission was primarily concerned that AT&T, which dominated the market for telecommunications services, would impede competition in the market for data-based services, which relied on AT&T's infrastructure to reach consumers. In the 1970 *Computer I* decision, the Commission concluded that a common carrier offering both telecommunications and data processing services would have the *incentive* and *ability* to discriminate against unaffiliated providers by denying them access to reasonably priced telecommunications services and could cross-subsidize unregulated data processing services with common carrier services subject to rate regulation. Based on that determination of incentive and ability, the Commission adopted rigorous prophylactic safeguards.[17] More than a decade later in *Computer II*, concerned about AT&T's entry into information service markets and recognizing the increasing difficulty with separating data from voice services, the Commission decided to deregulate all computer-enhanced services, but it continued to regulate the provision of "basic" telecommunications services by common carriers.[18] In doing so, the Commission acted largely in anticipation of potential future discrimination by dominant telecommunications service providers against new competitors, and its decision contributed to the open and accessible environment that consumers enjoy today.

Video Dialtone: In 1992, the FCC adopted pro-competitive safeguards in an emerging market when it required local exchange carriers offering video dialtone (or multichannel video programming) service to provide competitors with access to basic services on a nondiscriminatory basis as a condition of modifying its ban against the provision of video programming services by telephone companies.[19] The Commission concluded, "This concept of equal access will encourage competition and promote our diversity goals. If video dialtone is to provide the maximum public interest benefits, we must ensure that video dialtone does not give

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[16] *See id.* at 12125 ("[V]ertically integrated programmers generally retain the *incentive* and *ability* to favor their cable affiliates over nonaffiliated cable operators . . . to such a degree that, in the absence of the prohibition, competition and diversity in the distribution of video programming would not be preserved and protected.") (emphasis added).

[17] *See Computer I*, 28 FCC 2d at 284.

[18] *See Computer II*, 77 FCC 2d at 387.

[19] *See In re* Telephone Company-Cable Television Cross Ownership Rules, Sections 63.54-63.58, *Second Report and Order, Recommendation to Congress, and Second Further Notice of Proposed Rulemaking*, 7 FCC Rcd 5781, 5783-84 (1992) ("*Video Dialtone Second Report and Order*").

any provider of competitive services an unfair advantage over its competitors."[20] These safeguards were based on well understood notions of potential harm, given the *incentive* and *ability* of providers to discriminate and given local exchange carriers' sole control over telecommunications infrastructure.[21]

SDARS: When it created Satellite Digital Audio Radio Service ("SDARS") in the late 1990s, the Commission designed an environment that would support two service providers. In the absence of any specific evidence of discriminatory behavior by these nascent entities, but concerned about the *incentive* and *ability* that a market with two SDARS providers would give those providers to discriminate, the Commission imposed an interoperability requirement on SDARS receivers.[22] The effect was to protect consumers from being at the mercy of the network operator by ensuring consumer choice.

EchoStar/DirecTV Merger: The most recent example of the FCC's acting in anticipation of potential harm is its October 2002 decision not to approve the proposed merger of DBS providers EchoStar and DirecTV. The Commission expressed concern with "replac[ing] a vibrant competitive market with a regulated monopoly. This flies in the face of three decades of communication policy that has sought ways to eliminate the need for regulation by fostering greater competition."[23] Ultimately, despite lack of concrete evidence of specific harm, the Commission could not endorse the proposed merger and exercised its expert judgment about the nature of the market and the *incentive* and *ability* of key market players to discriminate, concluding that the merger "would eliminate the viable facilities-based intramodal competition that exists in a market with high barriers to entry."[24]

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The market for the delivery of broadband services exhibits many similarities to the marketplace conditions that were the impetus for Commission action in each of the examples outlined above. The same incentives for a broadband provider to favor affiliated content and to hinder competition operate to threaten consumers' ability to access unaffiliated content, application, and service providers. For example, the SDARS situation and the proposed EchoStar/DirecTV merger are directly analogous to the current market for delivery of broadband services, where virtually everywhere consumers have a choice of no more than two broadband

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[20] *In re* Telephone Company-Cable Television Cross Ownership Rules, Sections 63.54-63.58, *Further Notice of Proposed Rulemaking, First Report and Order and Second Further Notice of Inquiry*, 7 FCC Rcd 300, 314 (1991).

[21] *See Video Dialtone Second Report and Order*, 7 FCC Rcd at 5827-32.

[22] *See In re* Establishment of Rules and Policies for the Digital Audio Radio Satellite Service in the 2310-2360 MHz Frequency Band, *Report and Order, Memorandum Opinion and Order and Further Notice of Proposed Rulemaking*, 12 FCC Rcd 5754, 5796 (1997).

[23] Statement of Chairman Michael K. Powell concerning *EchoStar/DirecTV Order*, 17 FCC Rcd at 20684.

[24] *EchoStar/DirecTV Order*, 17 FCC Rcd at 20663.

service providers and most have access to only one.[25] Historically, the Commission has consistently not embraced a market structure with limited facilities-based competition without adopting substantial safeguards.[26] Though alternative broadband sources may be on the distant horizon, in realistic terms, a broadband market consisting of two facilities-based providers will define the Internet for some time, and such a structure facilitates the ability of network operators to infringe or encumber the relationships among their customers or between their customers and destinations on the Internet. Past experience demonstrates that safeguards are needed until such time as a competitive market for the delivery of broadband services emerges.

Moreover, as with data processing services in the *Computer Inquiries* and the delivery of video programming in the video dialtone proceeding, broadband service involves a network operator in a strong position to act in a discriminatory manner as it rolls out a new service via its existing infrastructure. Furthermore, the same vertical integration concerns that spurred enactment of the program access requirement exist with respect to broadband, where pipe providers frequently offer affiliated content over the Internet—websites that they quite naturally would prefer that their subscribers visit over unaffiliated websites providing similar material.

II.

In each of the instances outlined above, the Commission acted based on an understanding of the harm that could occur in a market with limited competition in the absence of safeguards. In the broadband context, where there is little or no marketplace competition, the threats of harm are substantial and tangible. There is no question that network operators have the capability to block users' access to particular websites. Alternatively, network operators could more subtly slow or impede consumer access to lawful Internet content, applications, or services—and the infrastructure that would allow them to do so is already in place. Network operators today control how content moves across the network. Because content providers must

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[25] According to recent statistics, 38 percent of households have access only to cable broadband services, 10 percent of households have access only to wireline broadband services, and 33 percent of households have access to both. *See Ex Parte* submission of Verizon in CC Docket Nos. 01-337, 01-338, 96-98, 98-147 & 02-33, Attachment at 5 (Sept. 30, 2002) (citing JP Morgan, "The Cable Industry, Nov. 2, 2001," Cahner's In-Stat). This means that one-third of households have a choice of only two facilities-based broadband providers, nearly half have available to them only one such provider, and almost twenty percent do not have access to any broadband services at all.

[26] Cellular telephony offers a telling example of the failure of a market with limited facilities-based competition. Early in the cellular era, the FCC granted licenses to only two providers in each of 734 geographic areas, and cellular providers had little need to compete with each other. *See* Thomas Sugrue, Remarks at the 11th Annual FT World Mobile Communications Conference (Nov. 10, 1999) (available at http://wireless.fcc.gov/statements/11-10-99.html). The predictable result was that two cellular operators generally split the market evenly, service was expensive, and there was little innovation. *See id.* Recognizing that continued limited competition was not in the best interests of consumers, the FCC took steps in the mid-1990s to open up the wireless market to more providers. *See id.* As a result, today cellular service quality is vastly improved, and prices have fallen substantially. *See id.*

host their offerings on a server controlled by the network operator, the network operator has the opportunity, for example, to choose conditional access and billing, control the terms of content playback, and decide on formats and protocols. As broadband operators manage the flow of content over their networks, they should be driven by consumer demand rather than by affiliation with a broadband service provider.

Network operators also have acted to restrict consumers from attaching nonharmful devices to the network. Consumers may only access the broadband network from nodes connected to the modem. Network operators do not permit Network Address Translation gateways ("NATs"), which translate an IP address used within one network to a different IP address known within another network (generally local IP addresses on one network and global outside IP addresses on the other). By banning NATs, the network operator controls the configuration of the consumer network and can both restrict the right of consumers to attach their choice of equipment to the network and discriminate on the basis of packet content by looking at packet headers for NAT-redirected addresses. Denying consumers the right to attach their choice of devices to the network violates the navigation device rules and the longstanding principles of *Carterfone*.[27]

In spite of the Commission's explicit extension of the *Carterfone* right-to-attach principle to navigation devices,[28] cable operators have required device manufactures to go to great lengths to enable consumers to use their products on the network. When Microsoft developed the xBox gaming device, it talked with cable operators individually to get the operators' approval, despite the fact that xBox already met established industry standards. Such a burdensome process adds months to the rollout of exciting new products, thereby stifling innovation, harming consumers, and threatening the viability of smaller providers that lack the resources to endure such delays. Requiring a provider of customer premises equipment to obtain the prior approval of BellSouth, Qwest, Verizon, Alltel, and others before rolling out a new device would never be tolerated, and neither should cable operators be permitted to engage in such counterproductive and harmful behavior at the expense of consumers and innovative product and service providers.

Finally, as recently as two months ago, cable broadband subscriber agreements prohibited customers from creating virtual private networks ("VPNs") using their cable modem.[29] VPNs use a "virtual" connection routed through public facilities such as the Internet, and their primary use today is to allow consumers to connect to the workplace from home. By relying on public facilities, VPNs avoid the higher cost and inefficiency of using dedicated connections such as leased lines, and because they typically use encryption in establishing connections, they permit secure communications to a company's private network, even though

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[27] *See Carterfone*, 13 FCC 2d at 423 (upholding the right of consumers to connect nonharmful, non-interfering devices to the telephone network).

[28] *See Navigation Devices Order*, 13 FCC Rcd at 14778.

[29] *See, e.g., Comments of the High Tech Broadband Coalition*, CC Docket No. 02-52, at 11-13 (June 17, 2002).

the connection is established using the facilities of a public, third-party service provider. In today's global economy, VPNs are a valuable way for employees to stay remotely connected with their offices and also give working parents the flexibility to spend time at home with their children while still being able to login to the workplace. Until recently, cable operators either prohibited residential subscribers from using VPNs over their broadband connection or charged residential subscribers twice as much for a business-level connection on which VPN use was permitted.[30]

Lately, several cable operators purport to have removed any restrictions on VPN use from their subscriber agreements and acceptable use policies.[31] The Coalition welcomes these changes, provided that they are a true lifting of restrictions on subscribers' use of their broadband service and not illusory. Comcast's subscriber agreement and acceptable use policy, for example, no longer explicitly prohibit VPN use; however, Comcast has reserved the right to "revise th[e] Acceptable Use Policy (the 'Policy') from time to time without notice by posting a new version of this document on the Comcast Web site."[32] Cox has removed the words "virtual private network usage" from its enumeration of prohibited "business enterprise" uses of its service in its acceptable use policy. The effect of the language change may be minimal, however, as the policy still prohibits use of the service "for any . . . business enterprise, including, without limitation," several activities, including IP address translation and similar facilities intended to provide additional access.[33] VPN usage could fall within the scope of this provision, even though the words "virtual private network usage" no longer appear.

As explained in the attached declaration from Alan Weinberger of ASCII, the reasons cable operators have advanced to justify restrictions on VPN use are not compelling.[34] In particular, VPNs do not place a greater burden on the broadband network.[35] Moreover,

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[30] *See, e.g.*, Cox Acceptable Use Policy, Sec. 5, *available at* http://www.cox.com/INETIncludes/Policy/ acceptable.asp (updated Apr. 1, 2002); Comcast High-Speed Internet Service Subscriber Agreement, Sec. 6(b)(viii), *available at* http://comcast.comcastonline.com/memberservices/subscriberagreement/ default.asp) (May 21, 2002).

[31] *See Ex Parte* Notice of Comcast Corp. in CS Docket No. 02-52, at 2 (May 7, 2003); Written *Ex Parte* of Cox in CS Docket No. 02-52 (Apr. 7, 2003). Although Cox did not point this out in its April filing, it recently removed a reference to "virtual private network usage" as an example of use of its service as a business enterprise from its acceptable use policy. *Compare* Cox Acceptable Use Policy, Sec. 5, *available at* http://www.cox.com/INETIncludes/Policy/ acceptable.asp (updated Apr. 1, 2002), *with* Cox Acceptable Use Policy, Sec. 5, *available at* http://www.cox.com/INETIncludes/Policy/ acceptable.asp (visited July 17, 2003).

[32] Comcast Acceptable Use Policy, Important Note, *available at* http://comcast.net/terms/use.jsp (July 16, 2003). Furthermore, any changes Comcast makes to the agreement take effect immediately. *See id.* ("All revised copies of the Policy are effective immediately upon posting.").

[33] Cox Acceptable Use Policy, Sec. 5, *available at* http://www.cox.com/INETIncludes/Policy/ acceptable.asp (visited July 17, 2003).

[34] *See* Declaration of Alan D. Weinberger ¶¶ 7-13, attached hereto as Exhibit A.

[35] *See id.* ¶¶ 9-13.

dialing into an office via a VPN to check e-mail is no different from using a residential phone line to check an office voicemail account, and just as the latter does not convert a residential phone line to a commercial one, so establishment of a VPN should not convert standard residential broadband service to a commercial service at nearly double the cost. Network operators, whether cable operators or telcos, should be neutral providers of a service—broadband connectivity—and should not be permitted to make value judgments about the types of services, content, and applications their subscribers may access if those subscribers are not exceeding their allotted bandwidth. While the Coalition fully supports the recent apparent easing of restrictions on VPN use in cable subscriber agreements and acceptable use policies, the existence of such prohibitions until only recently should give the Commission pause. The fact that cable operators believed that such limits were acceptable and attempted to justify them on grounds that the Weinberger declaration demonstrates are questionable shows the need for Commission action and continued vigilance in this area.

III.

In response to this and other evidence before the Commission, network operators essentially have argued: Don't worry. Trust us. But the history of these operators over the past three decades teaches otherwise. The Commission cannot leave to chance or purported goodwill how this important broadband infrastructure will be accessed and used by consumers, network operators, and content providers. Indeed, policymakers' past experience with consumers' right to attach nonharmful devices to the network is very instructive with respect to principles of consumer access. During consideration of the 1996 Telecommunications Act, Congress found (and the Commission later concurred) [36] that the market for cable navigation devices was not competitive, as it was difficult for consumers to attach their choice of nonharmful devices to the network, and that set-top boxes and other subscriber equipment were subject to exclusionary policies by the cable industry.[37] When it adopted regulations to implement a Congressional directive intended to ensure the commercial availability of navigation devices,[38] the Commission explained that it was extending the longstanding "*Carterfone* 'right to attach' principle . . . that devices that do not adversely affect the network may be attached to the network" to cable systems.[39] Even with respect to telcos, the impetus for *Carterfone* was a telephone company's

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[36] *See Navigation Devices Order*, 13 FCC Rcd at 14780, 14781-82.

[37] *See* S. Conf. Rep. No. 104-230, at 181 (1996) ("One purpose of [the navigation device provision] is to help ensure that consumers are not forced to purchase or lease a specific, proprietary converter box, interactive device or other equipment from the cable system or network operator."); *see also* H. Rep. No. 104-204, at 112 (1995) ("[T]he transition to competition in network navigation devices and other customer premises equipment is an important national goal. Competition in the manufacturing and distribution of consumer devices has always led to innovation, lower prices and higher quality.").

[38] Telecommunications Act of 1996, Pub. L. No. 104-104, § 304, 110 Stat. 56, 125-26 (codified at 47 U.S.C. § 549).

[39] *Navigation Devices Order*, 13 FCC Rcd at 14778.

refusal to allow consumers to attach a nonharmful device to the network.[40] Without extension of this well-engrained principle to broadband, consumer expectation are at risk.

IV.

The Commission must act now to ensure the continued right of consumers to access the lawful Internet content, applications, and services of their choice and to attach any nonharmful devices to the network. To date, some Coalition members have proposed their own rules or solutions to ensure network neutrality in the broadband era. Earthlink and Media Access Project have advocated adoption of an open access policy, while Amazon.com has advanced a proposal that gives broadband service providers a choice between adhering to a prescriptive rule and permitting some open access on their networks.

Today, the Coalition suggests another proposal. This suggested rule would maintain the regime that dial-up consumers and content providers have relied on for years and apply that environment to broadband services, thereby ensuring that consumer access remains unimpeded in the future. Specifically:

> PREAMBLE: *Until the market for the delivery of broadband services to consumers is deemed competitive, narrowband rules and principles that guarantee consumers (a) unfettered access to the Internet and (b) the ability to connect their choice of nonharmful devices to the network, should be applied to the provision of services by broadband network operators. Such protections would permit nondiscriminatory practices by broadband network operators, such as adopting a nondiscriminatory system of tiered pricing for consumers based on such consumers' actual use of the broadband service, or entering into promotional arrangements with third parties that solely give such parties an advantageous position on the first screen or other menu options presented to subscribers.*
>
> A broadband network operator shall not, on a discriminatory or unreasonable basis, interfere with or impair subscribers' ability to use their broadband service to access lawful Internet content or services, use applications or services in connection with their broadband service, or attach nonharmful devices to the network. Nothing herein shall prohibit such provider from managing its broadband network in a technically efficient manner or from implementing reasonable measures to prevent unlawful conduct.

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[40] *See In re* Use of the Carterfone Device in Message Toll Telephone Service; In re Thomas F. Carter and Carter Electronics Corp., Dallas, Tex. (Complainants), v. American Telephone and Telegraph Co., Associated Bell System Companies, Southwestern Bell Telephone Co., and General Telephone Co. of the Southwest (Defendants), *Decision*, 13 FCC 2d 420, 421 (1968).

This suggested rule is designed to extend well-accepted and established principles from the narrowband world, such as network neutrality, to broadband. It would further the important and fundamental goal of maintaining unfettered consumer access to lawful Internet content, applications, and services using nonharmful devices. Its purpose, quite simply, is to ensure that when a consumer types in a URL on a broadband ISP service, she reaches her chosen destination without interference or impairment by the network operator. It embodies the statement made by Chairman Powell before the Senate Commerce Committee last month: "When I sit down at the Internet, I can go anywhere I choose."[41]

The suggested rule is inherently limited in scope. First, it would sunset when the market for broadband services becomes competitive. Second, the proposed rule is narrowly tailored, as it would not affect any of a network operator's policies that are applied on a nondiscriminatory basis. It also would not apply to private arrangements that give some companies but not others a link on a network operator's first page. The Coalition understands that network operators may give preferred placement to certain content by, for example, putting links to some websites and not others on its home page. What is not acceptable is a network operator's using preferred placement as a pretext for impairing access to other lawful Internet content—the consumer who types in the URL for krispykreme.com should not be redirected to dunkindonuts.com. The proposed regulation also would not apply to tiered pricing arrangements that differentiate among consumers based on bandwidth use, provided that consumers may engage in any lawful activities within their allotted bandwidth.

The proposed rule would advance several stated goals of the Commission, including minimizing regulation of broadband and reducing regulatory uncertainty, which would spur investment in broadband-based content and services as well as broadband deployment.[42] Failing to carry the critical tenet of network neutrality forward would create uncertainty in an environment where network operators have the ability and the incentive to impair consumer access to the Internet, while endorsement of the narrow and unintrusive regulation put forth by the Coalition would provide the sureness to spur companies to invest in robust and diverse broadband content and services that are essential to increasing consumer broadband take-up rates.

The proposal is thus a narrow, minimally intrusive regulation that would benefit consumers and content and service providers while imposing no burden on network operators unless they already intend to discriminate or restrict consumers' ability to navigate on the Internet. If network operators' representations that they support unfettered consumer access to lawful Internet content are true and they do not intend to impair users' ability to go anywhere,

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[41] *FCC Oversight: Hearing Before the Senate Comm. on Commerce, Science & Transportation*, 108th Cong. 157 (2003) (response by Michael K. Powell, Chairman, Federal Communications Commission).

[42] *See* Blair Levin, *et al.*, Legg Mason, Beyond UNE-P: The Edge vs. The Network 5 (2002) ("[I]n a broadband world in which networks cannot discriminate, more value is likely to be created on the edge than on the networks."); *Wireline Broadband Notice*, 17 FCC Rcd at 3022 ("[B]roadband services should exist in a minimal regulatory environment that promotes investment and innovation in a competitive market.").

then such a safeguard would cost them nothing. And if network operators do have plans to interfere with consumers' ability to go anywhere, then the cost of a targeted regulation would be far outweighed by the benefits to consumers and the Internet industry. The suggested rule is thus a no-lose proposition that advances the public interest.

* * *

As this submission demonstrates, there is a well-documented and longstanding history of action by Congress and the Commission to protect consumers by taking specific steps to prevent potential future discriminatory behavior in situations where dominant service providers have the incentive and ability to exploit their gatekeeper position to the detriment of consumers. Moreover, the incentive and ability for network operators to impair user access to broadband exists now. There is ample precedent for taking narrow, targeted steps to ensure that consumers continue to have unfettered access to the Internet in the broadband era, and the Commission should act by adopting the limited safeguard proposed by the Coalition in the pending broadband proceedings.

Kindly address any questions to the undersigned.

Sincerely,

Gerard J. Waldron

Gerard J. Waldron
Counsel to the Coalition

Attachments

cc: The Honorable Michael Powell
The Honorable Kathleen Abernathy
The Honorable Michael Copps
The Honorable Kevin Martin
The Honorable Jonathan Adelstein
Mr. Paul Gallant
Mr. Chris Libertelli
Mr. Jonathan Cody
Mr. Matt Brill
Ms. Stacy Robinson
Mr. Jordan Goldstein
Ms. Jessica Rosenworcel
Mr. Dan Gonzalez
Ms. Catherine Bohigian
Ms. Johanna Mikes
Mr. Kenneth Ferree
Ms. Barbara Esbin
Mr. Kyle Dixon
Ms. Marjorie Greene

Ms. Mary Beth Murphy
Mr. John Norton
Mr. William Maher
Ms. Michelle Carey
Mr. Thomas Navin
Mr. Brent Olson
Ms. Carol Mattey
Mr. Scott Bergmann
Mr. John Rogovin
Mr. Harry Wingo
Dr. Robert Pepper
Mr. Simon Wilkie
Ms. Jane Mago
Ms. Maureen McLaughlin
Mr. Scott Marcus

Exhibit A

DECLARATION OF ALAN D. WEINBERGER

Mr. Alan D. Weinberger declares that:

1. My name is Alan Weinberger. I am Chairman, President, and Chief Executive Officer of The ASCII Group, Inc. ("ASCII"), located at 7101 Wisconsin Avenue, Suite 1000, Bethesda, MD 20814. I have held this position for nineteen years. As such, I have personal knowledge of the facts set forth in this declaration.

2. ASCII is the nation's oldest and largest group of IT solution providers and computer value added resellers ("VARs") and represents more than 2,000 small businesses that are the key providers of IT solutions to small business and residential customers. Founded in 1984, ASCII is a for-profit organization that offers independent computer solution providers and VARs increased leverage through collective business deals with hardware and software companies, distributors, and IT service suppliers. ASCII also presents to government officials the views of its members on issues that concern them. ASCII's members supply businesses and residential customers with complete IT solutions, from computers and other peripheral devices to internal and external networking (i.e., access to the Internet). By enabling small and medium-sized businesses to access the Internet at high speeds, ASCII's solution provider members offer products and services that are critical to important segments of the U.S. economy. The solution providers also supply increasingly popular home networking solutions.

3. Because of their in-the-field involvement in broadband deployment, ASCII's members are deeply committed to the continued success of broadband as well as to the ability of broadband users to continue to attach a wide variety of devices to, and use a wide variety of services with, their broadband subscriptions.

Virtual Private Networks

4. ASCII is particularly concerned about the ability of broadband subscribers to use virtual private networks ("VPNs"). As explained below, VPNs are the best friend of working parents and busy executives because they enable users, among other things, to access a company's e-mail server from home.

5. A VPN uses public facilities (typically the Internet) to connect remote users with the appearance of a "private network" or directly-connected network experience. While VPNs can be used to join remote sites or networks (known as a "site-to-site" VPN), the more common use of a VPN is to connect a remote user, typically at home, to a private corporate network at the remote user's workplace (known as a "remote-access" VPN). VPNs work by sending data packets through "tunnels" (using a tunneling protocol), so that the information being sent through the VPN is embedded within packets that "look" like ordinary data. In other words, from the ISP network's perspective, information sent through a VPN is indistinguishable from any other data on the network. By using a "virtual" connection routed through public facilities such as the Internet, VPNs avoid the higher cost and inefficiency of using dedicated connections such as leased lines. Because they typically use encryption in establishing connections, remote-access VPNs permit secure communications between remote users and a company's private network even though the connection is established using the facilities of a public, third-party service provider.

6. VPNs are critically important because they allow residential subscribers to connect to their workplace networks through software applications such as Citrix Systems' Citrix®. In today's global economy, VPNs are an extremely valuable way for employees at home to stay "connected" with their offices. Perhaps even more importantly, VPNs give

working parents the flexibility to spend time at home with their children while still being able to "log in" to work from home. VPNs can be set up using dial-up or broadband connections. While it is difficult to provide exact figures because of the decentralized nature of VPN installations, it has been estimated that the market for VPN hardware and software installations is well over $1 billion.[1]

Cable Operators' Opposition to VPN Use

7. ASCII is concerned that some cable operators have restricted the ability of cable modem subscribers to use VPNs. As explained above, VPNs provide invaluable functionality to working parents and busy executives, while also maintaining the security of corporate IT systems. Despite these tremendous advantages of routine use, some cable operators have sought to charge exorbitant rates for residential subscribers' use of VPNs. While many cable operators have recently showed signs of relenting from their opposition to the use of VPNs by broadband customers, it is nevertheless important to set the record straight regarding some of the technical arguments cable operators have used to justify restrictions on the establishment of VPNs on their networks.

8. As with any network connection, a VPN user is able to be more productive at higher bandwidths, making all the more important the use of underlying broadband connections, such as cable modems or DSL. Most subscribers prefer to rely on cable modem service for a broadband connection to the Internet from home. Unfortunately, the cable industry has resisted the use of VPNs by residential cable modem subscribers, typically by including provisions in the cable ISP's terms of service that prohibit the use of VPNs.

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[1] *See* Bob Bellman, *Do-it-yourself VPNs*, Business Communications Review, May 1, 2002, at 28.

9. The cable industry has made two technical arguments against the use of VPNs by cable modem subscribers, both of which are baseless. Cable operators have argued that: (1) VPNs require static IP addresses, while cable operators provide dynamic IP addresses, making VPNs more burdensome and thus justifying a special expense; and (2) VPNs represent a "bandwidth-hogging" application that increases the burden on the cable operator's network. Both of these claims are unfounded, as further explained below.

Dynamic vs. Static IP Addresses

10. In reply comments filed in the FCC's pending cable broadband proceeding, the National Cable & Telecommunications Association ("NCTA") stated:

> To operate effectively, VPNs require a static IP address – i.e., an Internet address that remains the same every time the user boots up his or her computer and connects to the Internet. But, for a variety of technical reasons, cable operators generally assign dynamic IP addresses – i.e., addresses that change each time the user connects to the Internet – to residential subscribers.[2]

NCTA went on to provide technical reasons for why it is inefficient to assign static IP addresses to residential subscribers. However, this argument misses the point entirely because *VPNs do not require static IP addresses to operate effectively* (or, indeed, to operate at all). In fact, residential cable modem subscribers today are technically capable of using VPNs despite the fact that most, if not all, cable networks assign dynamic IP addresses to residential subscribers. So the argument that VPNs *require* a static IP address is simply false—VPNs are capable of functioning regardless of whether residential subscribers are assigned a dynamic or a static IP address.

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[2] Reply Comments of the National Cable & Telecommunications Association, CS Docket No. 02-52, at 13 (Aug. 6, 2002).

11. The cable industry's comments seem to confuse the fact that in a remote access VPN—the type employed in the case of the average residential subscriber connecting to her workplace's Local Area Network—the remote VPN user has two IP addresses. First, the cable operator ISP assigns the remote user an IP address when the latter connects to the ISP's network. From the standpoint of the operation of the VPN, the assigned IP address can be dynamic or static, as long as an Internet connection is established with the workplace server. (In the case of most ISPs, the remote user is assigned a dynamic IP address using the dynamic host control protocol ("DHCP").) Second, the workplace or enterprise network assigns the remote user an IP address through the VPN. This address is often static, but it can be either static or dynamic depending upon how the workplace network operator chooses to implement the VPN. The key facts are: (1) the assignment of the second IP address is made by the workplace or enterprise network and has *no effect* on how the cable operator chooses to manage its network; and (2) the VPN can operate regardless of whether the IP address assigned by the cable ISP is dynamic or static—all that is needed is the establishment of an Internet connection. The members of ASCII, who establish VPN networks for small business and residential consumers on a routine basis, have not experienced any network problems based on dynamic versus static IP addresses.

Bandwidth "Hogging"

12. The cable industry also has justified the restrictions it places on the use of VPNs by claiming that they place a greater burden on the cable ISP's network.[3] However, this concern is misplaced.

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[3] *See, e.g.*, Ex Parte Filing by Cox Communications, Inc., CS Docket No. 02-52, filed April 7, 2003.

13. While a VPN typically involves some overhead, such as header information that is part of the VPN's tunneling protocol, this overhead is minimal and relatively insignificant compared to the actual information being sent and received via the VPN. Moreover, the overhead associated with VPNs is often more than compensated for by the fact that many VPNs compress the information they send within the VPN tunnel. *In many cases, VPNs actually result in bandwidth savings of up to 40 percent*, depending upon the type of information being sent, because of efficiency gains resulting from fewer redundant re-sends. Moreover, some types of information are easily compressed (such as plain text and ordinary HTTP documents), so that the VPN actually uses less bandwidth to transmit such information than an ordinary Internet connection because the VPN's compression saves more bandwidth than the VPN overhead consumes. If, however, the information being sent is not easily compressed (for example, JPEG files), then a VPN may use slightly more bandwidth—but only approximately 10 percent—than an ordinary Internet connection, because the overhead will not be offset by the VPN's compression. Given that most VPN users typically log in to their workplace networks to use e-mail and word processing programs, most information sent through a VPN is likely to be easily compressible, meaning that VPNs should actually place a *lower burden* on the cable ISP's network. Consequently, the cable industry's claims that a typical VPN user places an extra burden on the network are inaccurate and unfounded. VPNs simply establish a connection between a remote user and an enterprise or workplace server; the actual bandwidth consumed by a cable modem user relying on a VPN depends upon what the user does over the connection.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Alan D. Weinberger
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July 16, 2003

PROPOSED RULE

PREAMBLE: *Until the market for the delivery of broadband services to consumers is deemed competitive, narrowband rules and principles that guarantee consumers (a) unfettered access to the Internet and (b) the ability to connect their choice of nonharmful devices to the network, should be applied to the provision of services by broadband network operators. Such protections would permit nondiscriminatory practices by broadband network operators, such as adopting a nondiscriminatory system of tiered pricing for consumers based on such consumers' actual use of the broadband service, or entering into promotional arrangements with third parties that solely give such parties an advantageous position on the first screen or other menu options presented to subscribers.*

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