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## **Network Neutrality Overview**

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## NETWORK NEUTRALITY OVERVIEW

*The purpose of this paper is to provide a brief overview of the origins and current status of the “network neutrality” debate in the United States and set the stage for a panel discussion by advocates on both sides of the issue. It is not intended to summarize the arguments made in support of or opposition to network neutrality and it is not intended to take a substantive position on either side of the debate.*

### I. WHAT IS “NETWORK NEUTRALITY”?

First, what is “network neutrality” (or net neutrality)? As the Congressional Research Service (CRS) observed,

The move to place restrictions on the owners of the networks that compose and provide access to the Internet, to ensure equal access and nondiscriminatory treatment, is referred to as “net neutrality.” There is no single accepted definition of “net neutrality.” However, most agree that any such definition should include the general principles that owners of the networks that compose and provide access to the Internet should not control how consumers lawfully use that network; and should not be able to discriminate against content provider access to that network.<sup>1</sup>

First, it is important to note that this general description of “net neutrality” is quite similar to the traditional obligation of common carriers—including telecommunications common carriers—to serve the public without discrimination.<sup>2</sup> It is also important to appreciate that the CRS explanation requires network operators to be “neutral” toward the two distinct groups that typically constitute an Internet-enabled connection: individual consumers and application or content providers. Each of these groups has unique as well as shared concerns about network neutrality. Finally, the CRS concept of “neutrality” encompasses two specific aspects: unfettered access by consumers and non-discrimination among application and content providers.

In addition to defining network neutrality, it is equally important to understand the motivations and incentives surrounding the issue. Broadly speaking, proponents of regulations to require network neutrality fall into two categories<sup>3</sup>:

- social activists, who are principally concerned with the free speech and political implication of a non-neutral Internet where network providers could control or influence what is being said over the Internet (by, for example, blocking access to a certain political website or charging one political candidate more than another to utilize the Internet)

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<sup>1</sup> Congressional Research Service, “Net Neutrality: Background and Issues”, May 16, 2006, <http://www.fas.org/sgp/crs/misc/RS22444.pdf>

<sup>2</sup> See discussion of common carriage at pp. 5-6, *infra*.

<sup>3</sup> See also, “So Who Is *For* Network Neutrality Regulation?” at p. 19, *infra*.

- application and content providers, who are concerned that network operators who also have a financial interest in competing applications or content would favor their own interests through discrimination in pricing, product bundling, quality, reliability, and other competitive factors.

Naturally, the principal opponents of network neutrality regulation are the network operators, particularly the telephone and cable television industries.<sup>4</sup>

One Wall Street analyst summarized the network neutrality issue in the following terms:

**“The carriers’ ace in the hole is their control of last-mile broadband access – the ability to create an advantage for their own voice and video services through various means: pricing, traffic prioritization and segregation – *depending on what regulation and the marketplace allow* – and to reestablish themselves as gatekeepers. (More extreme approaches involving traffic blocking and impairment appear to be off limits, at least in the U.S.)”<sup>5</sup>**

Another investment analyst agreed, also pinpointing the source of the potential problem as the network operators’ “market power” as the result of their control of the “last-mile” connection between the Internet and the consumer:

Telco and cable broadband network owners are looking to claim more of the economic value that has flowed to edge providers of Internet Protocol (IP) services, such as Google, Yahoo!, Amazon, and eBay. ... We believe the battle is largely about market power and the extent to which Bells and cable can use their dominance in last-mile and local broadband access to extract premium returns.<sup>6</sup>

“Market power” derived from “last mile” bottlenecks has been a recurring theme throughout the history of telecommunications in the United States. And, as noted above, it continues as a recurring theme in the network neutrality debate: stakeholders that believe network operators possess “market power” seek network neutrality regulations to counter the perceived market power. Parties that oppose network neutrality regulations don’t see a “market power” problem.

Is the sort of market power discrimination feared by the proponents of network neutrality regulations more than a theoretical possibility? Broadly speaking,

To shift value, the telcos and cable could try various strategies, which roughly fall into three categories: (1) blocking or degrading traffic; (2) managing their networks in ways that improve overall operations but also complicate some edge services; and (3) requiring payments for providing preferential service to edge

<sup>4</sup> See also, “And Is *Against* Network Neutrality Regulations?” at pp. 20-21, *infra*.

<sup>5</sup> Merrill Lynch, “Net Neutrality: Will Carriers Remain Gatekeepers?,” Feb. 14, 2006 (bold in original, italics added)

<sup>6</sup> Stifel Nicolaus, “Net Neutrality: Value Chain Tug of War,” March 2006 (italics added)

traffic. In order for such tactics to work, *they must be technically feasible, not subject to significant market bypass, and not be objectionable to the government.*<sup>7</sup>

It is highly likely that government would not tolerate the easily detected, most intrusive and obviously anti-competitive tactics for which there is no “fair” justification. Literally blocking traffic or diverting it would be an example. Indeed, in the only case, so far, where a carrier attempted to block consumers from accessing a competitive service (a Voice over IP—VoIP—service), the FCC acted very quickly to compel the carrier to end the practice.<sup>8</sup> A few tactics are likely to be allowed as reasonable network management tools needed to keep the network available to all. Other tactics might be acceptable because they provide consumer benefits, such as providing more bandwidth or better quality of service or prioritizing traffic (for example, to give remote medical monitoring traffic higher priority than web surfing) for a higher fee. But many tactics that could be used by network operators can be both perniciously anti-competitive and beneficial at the same time and will therefore be subject to case-by-case weighing of such factors as anti-competitiveness, commercial reasonableness and fairness, and consumer benefit.

This following table summarizes the likelihood of various network neutrality tactics:

<b>NETWORK NEUTRALITY: FEASIBILITY OF TACTICS</b>			
<b>Tactics</b>	<b>Technical Feasibility</b>	<b>Market Feasibility</b>	<b>Likely Government Response</b>
<b>Blocking/Degradation:</b>			
· Blocking	Yes	Yes	Prohibit*
· Denial of Interconnection	Yes	Yes	Generally Prohibit
· Rerouting Traffic	Yes	Yes	Generally Prohibit
<b>New Transit Charges:</b>			
· Traffic Prioritization	Yes	Yes	Allow
· Tariffed Tiering	Yes	Yes	Allow
· Access Charges	Yes	Difficult	Generally Prohibit
· Non-Tariffed Charges	Case by Case	Case by Case	Case by Case
<b>Network Management:</b>			
· Quality of Service	Yes	Yes	Generally Allow
· Viruses, Hacking, etc	Case by Case	Case by Case	Case by Case
· Sharing Network Facilities	Case by Case	Case by Case	Case by Case
· Network Intelligence	Case by Case	Case by Case	Case by Case
· Spectrum Reservation	Yes	Case by Case	Case by Case
· Non-Acceptable Use Policies	Yes	Difficult	Case by Case
· Caching	Yes	Yes	Case by Case
<b>Tie-In With Devices</b>	Yes	Uncertain	Allowed for Wireless, But Not for Cable, Telcos

Source: Stifel Nicolaus, “Net Neutrality: Value Chain Tug of War,” March 2006

<sup>7</sup> *Id.*

<sup>8</sup> *See*, discussion of FCC enforcement and the *Madison River* case at pp. 16-17, *infra*.

The complexity, uncertainty and the huge economic and social costs involved with “network neutrality” makes for a worrying situation:<sup>9</sup>

- **Net neutrality advocates are worried** that a two-tier Internet would stifle innovation and consumer access to services, information, grassroots content and opinions.
- **Content and technology companies are worried** about having to pay for broadband distribution.
- **Carriers are worried** about losing the ability to monetize their network investments – and missing out on the revenue bonanza now being enjoyed by the Internet portals.
- **Policymakers are worried** about introducing legislation that is unnecessary, premature or ill-structured.

### **Contrasting Summary Views From the Press**

It is beyond the scope and purpose of this paper to summarize and critique all the arguments put forth by the proponents and opponents of network neutrality regulations. However, the press accurately reflects the bitterness of the disputes among the stakeholders.

For example, the Wall Street Journal editorialized strongly against net neutrality regulations on the grounds that regulations would favor the content suppliers over the network providers and thereby discourage deployment of broadband networks, all to the detriment of consumers:

Net neutrality travels under the euphemism of "nondiscrimination," which sounds very nice. But what it really means in practice is that the government dictates what AT&T and other Internet access companies can charge users of their pipelines. So there's "discrimination," all right -- against the companies that have invested billions to lay that pipe.

The beneficiaries of this discrimination are Google, Microsoft, Yahoo and other very rich Web businesses, which have loaded up on Beltway lobbyists to have these mandates imposed.

The one thing no one should be deceived about is that this ambush has anything to do with "consumers." Internet users will benefit most from the rapid rollout of broadband, which requires letting companies get a return on their investment. Net

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<sup>9</sup> Merrill Lynch, “Net Neutrality: Will Carriers Remain Gatekeepers?,” Feb. 14, 2006

neutrality is all about imposing price controls that shake down one corporate player for the benefit of another.<sup>10</sup>

The day after the Wall Street Journal editorial, the New York Times replied with a completely opposite editorial view:

Creating these sorts of tiers would destroy the democratic quality of the Internet. Big, wealthy voices would start to overpower the smaller, poorer ones. Innovation would be threatened if start-ups and small companies could not afford the new fees. The next eBay or Google might never be born.

Passing the legislation will not be easy. The cable and telephone companies have fought net neutrality with a lavishly financed and misleading lobbying campaign, because they stand to gain an enormous windfall. But there is growing support from individuals and groups across the political spectrum, from MoveOn.org to the Gun Owners of America, who worry about what will happen to their free speech if Internet service providers are allowed to pick and choose the traffic they carry.<sup>11</sup>

## **II. NETWORK NEUTRALITY CONCERN IS NOT SURPRISING: THERE IS A LONG HISTORY OF TELECOM “DISCRIMINATION” (AKA “MARKET POWER”) PROBLEMS ... AND PERIODIC GOVERNMENT REACTIONS**

Concern about discrimination by network operators with market power now being raised by network neutrality proponents is nothing new. There is long history of actual discrimination by network operators and government reactions to eliminate or at least mitigate the adverse consequences of market power, including unreasonable discrimination.

The following listing of some previous market power and discrimination problems is intended to be illustrative and certainly not exhaustive. An Internet search of each of the topical points will provide a considerable volume of relevant readings.

- **Common law’s “common carrier” nondiscrimination**

Historically a common carrier is a : “Transporter who holds himself out to the general public for the transportation of goods over a definite route and according to a regular schedule.”<sup>12</sup> The transportation common carrier concept was adopted into telecommunications.<sup>13</sup>

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<sup>10</sup> Wall Street Journal (Editorial), “Net Discrimination,” Jan. 2, 2007

<sup>11</sup> New York Times (Editorial), “Protecting Internet Democracy”, Jan. 3, 2007

<sup>12</sup> See e.g., The Lectric Law Library, <http://www.lectlaw.com/def/c069.htm>

<sup>13</sup> Before the formation of the FCC in 1934, interstate communications in the United States was subject to regulation by the Interstate Commerce Commission which was primarily concerned with traditional transportation common carriers.

In a telecommunications context, a telecommunications company that holds itself out to the public for hire to provide communications transmissions services [is a “common carrier”]<sup>14</sup>

The prohibition on unreasonable discrimination is the most important component of the common carrier obligation.<sup>15</sup>

- **Communications Act of 1934**

Title II of the 1934 Communications Act (47 U.S.C. sections 201-221) established regulated telecommunications common carriers, defined in a circular fashion as "any person engaged as a common carrier for hire." Even so, in Congressional debates leading to the 1934 Act, assurances were given that "common carriage" was well understood and needed little explanation.<sup>16</sup>

The statute made the non-discrimination obligation explicit. Section 202(a) of the Communications Act<sup>17</sup> provides:

It shall be unlawful for any common carrier to make any unjust or unreasonable discrimination in charges, practices, classifications, regulations, facilities, or services for or in connection with like communication service, directly or indirectly, by any means or device, or to make or give 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.

- **AT&T Consent Decree (1956)**

Prior to the settlement of a federal antitrust suit in 1956, the tightly integrated Bell System operating companies (AT&T Long Lines and the monopoly local Bell Operating Companies) only purchased equipment from the affiliated Western Electric Co. and consumers could only use terminal equipment rented from AT&T. Clearly, AT&T's market power discriminated heavily against competing suppliers of equipment.

The 1956 Consent Decree settling the case did not include the divestiture of Western Electric as originally sought by the Justice Department. Instead, AT&T was barred from engaging in any business other than the provision of common

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<sup>14</sup> ATIS Committee T1A1, [http://www.atis.org/tg2k/\\_common\\_carrier.html](http://www.atis.org/tg2k/_common_carrier.html)

<sup>15</sup> Eli M. Noam, *Beyond Liberalization II: The Impending Doom of Common Carriage*, 18 Telecomm. Pol'y 435, Sec. II (1994). See generally, Cybertelecom – Common Carriers [http://www.cybertelecom.org/notes/common\\_carrier.htm](http://www.cybertelecom.org/notes/common_carrier.htm)

<sup>16</sup> *Id.*

<sup>17</sup> 47 U.S.C. 202(a)

carrier communication subject to the non-discrimination requirements of the Communications Act.

- **Terminal equipment interconnection (1960s)<sup>18</sup>**

AT&T and the Bell System prohibited by common carrier tariff the interconnection of customer-owned terminal equipment to their networks, effectively using their network market power to discriminate against Western Electric's equipment competitors. In the 1956 *Hush-a-Phone* case, the FCC supported the restrictive tariffs but was overturned by the D.C. Circuit Court which held that the tariffs were an "unwarranted interference with the telephone subscriber's right reasonably to use his telephone in ways which are privately beneficial without being publicly detrimental."<sup>19</sup> In the later *Carterphone* decision<sup>20</sup>, the FCC determined that the tariff prohibitions on connecting "foreign attachments" directly to the telephone network was an unreasonable practice prohibited by Sec. 201 of the Communications Act. The FCC decreed that any equipment could be attached to the telephone networks as long as it didn't harm the network. By 1975, the FCC had established a registration program which allowed any equipment that met its minimal technical standards to be attached directly to the telephone network. These actions neutralized the telephone monopolies' market power and ability to discriminate against non-affiliated equipment suppliers, resulting in a competitive terminal equipment industry and rapid innovation of such equipment.

- **Long Distance competition/equal access (1970s)**

The advent of new microwave technologies in the 1960s made it theoretically possible for new entrants to compete with AT&T's long distance monopoly.<sup>21</sup> However, effective competition was difficult because AT&T's Bell Operating Companies and the so-called "independent" local telephone companies (those not affiliated with AT&T) would not connect with new "specialized" common carrier entrants such as MCI<sup>22</sup> on the same basis as they connected the AT&T Long Lines network for private line services. The FCC ordered the local telephone companies to cease the discrimination<sup>23</sup> and eventually specified that the Bell

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<sup>18</sup> See generally, Cybertelecom – Customer Premises Equipment, <http://www.cybertelecom.org/ci/cpe.htm>

<sup>19</sup> *Hush a Phone v. FCC*, 238 F.2d 266 (1956) The Hush a Phone device simply attached to the mouthpiece of a telephone handset to help keep the conversation private. It did not connect electrically to the telephone network.

<sup>20</sup> [In the Matter of Use of the Carterfone Device in Message Toll Telephone Service](#), 13 FCC 2d 420 (1968).

<sup>21</sup> Initially, the FCC found that adequate frequencies were available to allow private microwave systems (i.e., for the broadcast networks). *Above 890*, 27 FCC 359 (1959), *recon.*, 29 FCC 825 (1960).

<sup>22</sup> *Microwave Communications, Inc.*, 18 FCC 2d 953 (1969)

<sup>23</sup> In addition to broadly authorizing competitors to address "specialized" markets such as data transmission, the FCC directed local telephone companies to connect the specialized carriers' terminals to customers' premises. *Specialized Common Carriers*, 29 FCC 2d 870 (1971), *aff'd sub nom.* Washington Util. and Transp. Comm'n v. FCC, 513 F.2d 1142 (9<sup>th</sup> Cir.), *cert. denied*, 423 US 836 (1975)

System companies had to provide the “specialized” carriers with the interconnections that were similar to those provided to AT&T.<sup>24</sup>

However, the FCC had only authorized the competitive carriers to provide private line services, not basic long distance telephone service. In 1974, the FCC attempted to halt MCI’s “shared private line” that challenged AT&T’s long distance telephone services. In a series of cases, the DC Circuit Court overturned the Commission<sup>25</sup> by determining that specialized carriers could use their authorized facilities for any purpose unless the FCC’s authorization contained an explicit prohibition on such use.

Then, AT&T attempted to stifle long distance competition by substantially raising the cost of local interconnection and the local telephone companies provided the competitive long distance services with “unequal” interconnection that required competitors’ customers to dial as many as 10 extra digits. This discriminatory interconnection arrangement, flowing from the local exchange carriers’ market power, was a chronic problem even after the FCC brokered a deal that resulted in a discounted interconnection charge that reflected the inferior interconnection.<sup>26</sup> The battle between AT&T and its competitors was not resolved until the break-up of the Bell System.

- **AT&T Consent Decree/Break-up of Bell System (1982)**

The discriminatory “unequal access” provided to AT&T’s long distance competitors and the refusal of the local Bell System operating companies to purchase equipment from anyone except the affiliated Western Electric Co. led the Department of Justice in 1974 to file an antitrust suit. After the government presented its evidence, the presiding judge denied AT&T’s motion to dismiss, finding that the government’s case tended “to show that defendants have sought in a variety of ways to exclude the competition by restricting the interconnection to local facilities”<sup>27</sup> The suit was then settled in 1982 by AT&T’s agreement to divest the local Bell Operating Companies who were prohibited from offering long distance services.<sup>28</sup> Although the BOCs were still local service monopolies, the theory of the settlement was that they would have no incentive to discriminate in favor of either AT&T or its competitors because they were forbidden to provide long distance services of their own.

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<sup>24</sup> Bell System Tariff Offerings, 46 FCC 2d 413 (1974), *aff’d sub nom.* Bell Tel. Co. of Pennsylvania v. FCC, 503 F.2d 1250 (3d Cir. 1974), *cert. denied*, 422 US 1026 (1975).

<sup>25</sup> *Execunet I*, 561 F.2d 365 (D.C. Cir. 1977), *cert. denied*, 434 US 1040 (1978); *Execunet II*, 580 f. 2d 590 (D.C. Cir), *cert. denied*, 439 US 980 (1978); *Execunet III*, 659 F.2d 1092 (D.C. Cir. 1981)

<sup>26</sup> *ENFIA*, 71 FCC 2d 440 (1979)

<sup>27</sup> *United States v. AT&T*, 524 F. Supp. 1336, 1353 (D.D.C. 1981)

<sup>28</sup> *United States v. AT&T*, 552 F. Supp. 131, 226-34 (D.D.C 1982), *aff’d sub nom.* Maryland v. United States, 103 S.Ct. 1240 (1983). The details of the divestiture were approved by the District Court in August 1983.

- ***Computer Inquiry* regs (1971-1999)**

See “FCC’s *Computer Inquiry* Saga,” below.

### **III. MANY LAYERS OF GOVERNMENT ARE NOW INVOLVED IN NETWORK NEUTRALITY ISSUES**

*Currently, Network Neutrality concerns are being considered by the FCC, the FTC, and Congress at the Federal level and by a number of States (including Texas). The next portion of this paper will review the activity of the various government agencies.*

#### **A. THE FCC’S *COMPUTER INQUIRY* SAGA (1971-1999) AND RECENT DETERMINATIONS THAT BROADBAND INTERNET ACCESS IS AN “INFORMATION SERVICE,” NOT A COMMON CARRIER SERVICE.**

Network Neutrality isn’t the first time that the FCC has considered the implications of the convergence of communications and computers. Rather, the FCC conducted a nearly 30 year series of three *Computer Inquiry* proceedings to establish the boundaries and relationships between the regulated telecommunications industry and the unregulated computer services industry. Network Neutrality can be thought of as simply the latest phase of the *Computer Inquiry* saga.

It is also instructive for purposes of net neutrality to see how the FCC’s rules and policies changed over the three *Computer Inquiry* proceedings in response to available evidence of changes in technology, markets and market power. Presumably, the FCC will continue to adjust policies in the “net neutrality” era for the same reasons.

Discrimination and market power concerns drove the *Computer Inquiries*. Recently, the FCC observed that the *Computer Inquiry* restrictions (principally on the AT&T Bell System) were:

...necessary to protect the public against such anticompetitive activities as denial of access and predatory pricing by these “monopoly telephone companies exercising significant market power on a broad geographic basis.”<sup>29</sup>

Remote data processing services, which evolved in the 1960s, combined centralized computer processing with common carrier (at the time, largely the AT&T Bell System) telecommunications services. Data processing services were offered by a variety of companies not affiliated with the common carriers (AT&T Bell System). However, there was an expectation that AT&T would want to offer data processing services of its own, raising concerns about carrier discrimination against unaffiliated data processing

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<sup>29</sup> Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, CC Docket No. 02-33, released Sept. 23, 2005, FCC 05-150, [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/FCC-05-150A1.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-05-150A1.pdf) (hereinafter “Wireline Broadband Framework”) at 16.

companies and the leveraging of monopolized common carrier services into a competitive adjacent market. (These are the network neutrality concerns today.)

There were three *Computer Inquiry* proceedings to address these concerns:

- **Computer I (1971)**,<sup>30</sup> which distinguished unregulated “data processing” from regulated “communications” and required a maximally separated entity for data processing services offered by carrier’s affiliate.
- **Computer II (1980-81)**,<sup>31</sup> which distinguished “basic service” from “enhanced service” (an “information service” in the terms of the Telecommunications Act of 1996) and imposed “structural safeguards” (separate subsidiaries: less separation than *Computer I* maximal separation) for the AT&T Bell System’s enhanced services. Other carriers were required to provide basic services to affiliated and non-affiliated Enhanced Services Providers without discrimination but no structural separation. Terminal equipment was de-tariffed and deregulated.
- **Computer III (1986-1999)**,<sup>32</sup> which eliminated “structural separation” in favor of “non-structural safeguards” for dominant AT&T and Bell Operating Companies. The non-structural safeguards were an elaborate set of Open Network Architecture (ONA)/Comparably Efficient Interconnection (CEI) requirements. ONA required AT&T and the BOCs to “unbundle” basic services into Basic Serving Arrangements (BSAs) and Basic Service Elements (BSEs). CEI was the non-discrimination provision that required AT&T and BOCs to interconnect with non-affiliated ESPs on a basis which is comparable to the connections provided to an affiliated ESP. Other facility-based carriers were

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<sup>30</sup> Docket No. 16979, Final Decision and Order, 28 FCC 2d 267 (1971), *aff’d in part sub nom. GTE Service Corp. v. FCC*, 474 F.2d 724 (2d Cir. 1973), *decision on remand*, 40 FCC 2d 293 (1973)

<sup>31</sup> 77 FCC 2d 384 (1980), *recon.*, 84 FCC 2d 50 (1980), *further recon.*, 88 FCC 2d 512 (1981), *aff’d sub nom. Computer and Communications Industry Ass’n v. FCC*, 693 F.2d 198 (D.C. Cir. 1982) (*CCIA v. FCC*), *cert. denied*, 461 U.S. 938 (1983)

<sup>23</sup> **Phase I** - CC Docket No. 85-229, 104 FCC 2d 958 (1986), *recon.*, 2 FCC Rcd 3035 (1987), *further recon.*, 3 FCC Rcd 1135 (1988), *second further recon.*, 4 FCC Rcd 5927 (1989); *Phase I Order and Phase I Recon. Order vacated sub nom. California v. FCC*, 905 F.2d 1217 (9th Cir. 1990)

**Phase II** - CC Docket No. 85-229, Phase II, 2 FCC Rcd 3072 (1987), *recon.*, 3 FCC Rcd 1150 (1988), *further recon.*, 4 FCC Rcd 5927 (1989); *Phase II Order vacated, California I*, 905 F.2d 1217 (9th Cir. 1990)

**Remand Proceeding**, CC Docket No. 90-368, 5 FCC Rcd 7719 (1990), *recon.*, 7 FCC Rcd 909 (1992), *pets. for review denied sub nom. California v. FCC*, 4 F.3d 1505 (9th Cir. 1993)

**Post-Remand Proceedings:**

- BOC Safeguards - CC Docket No. 90-623, 6 FCC Rcd 7571 (1991), *vacated in part and remanded sub nom. California v. FCC*, 39 F.3d 919 (9th Cir. 1994), *cert. denied*, 514 U.S. 1050 (1995);
- BOC Provision of Enhanced Services - CC Docket No. 95-20, *Notice of Proposed Rulemaking*, 10 FCC Rcd 8360 (1995) *Further Notice of Proposed Rulemaking*, 13 FCC Rcd 6040 (1998);
- Report and Order, 14 FCC Rcd 4289 (1999), *recon.*, 14 FCC Rcd 21628 (1999)

**Update Proceeding:** *Further Comment Requested to Update and Refresh Record on Computer III Requirements*, CC Dockets Nos. 95-20 & 98-10, Public Notice, 16 FCC Rcd 5363 (2001)

required to observe the normal common carrier obligation of non-discrimination vis-à-vis their own and others' enhanced services

### **The End of *Computer Inquiry* Rules for Broadband Internet Access Services (2005)**

After determining that cable modem service was an “information service” rather than a common carrier service and being upheld on this judgment by the Supreme Court<sup>33</sup>, the FCC had to decide whether the functionally equivalent DSL broadband Internet access services then offered by telephone carriers as a common carrier service (and subject to *Computer Inquiry* rules) should also be classified as an information service. The Commission considered this issue in the *Wireline Broadband Framework* proceeding.<sup>34</sup> The FCC concluded that the *Computer Inquiry* regulations stifle broadband Internet access innovation and investment while the development of multiple broadband access networks (at least cable, telco and some wireless) mitigate market power and discrimination concerns. Therefore, the Commission declared wireline Internet access to be an information service and determined that the *Computer Inquiry* rules would no longer apply to such services.<sup>35</sup>

The Commission discounted the threat of discrimination by suggesting that the network operators have good business reasons to not discriminate. It said:

...we expect that facilities-based wireline carriers will have business reasons to continue making broadband Internet access transmission services available to ISPs without regard to the *Computer Inquiry* requirements. The record makes clear that such carriers have a business interest in maximizing the traffic on their networks, as this enables them to spread fixed costs over a greater number of revenue-generating customers.<sup>36</sup>

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<sup>33</sup> National Cable & Telecommunications Ass'n v. Brand X Internet Services, 125 S. Ct. 2688 (2005) (NCTA v. Brand X), aff'g 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, GN Docket No. 00-185 & CS Docket No. 02-52, Declaratory Ruling and Notice of Proposed Rulemaking, 17 FCC Rcd 4798 (2002) (Cable Modem Declaratory Ruling and NPRM)

<sup>34</sup> Wireline Broadband Framework, note 29, *supra*, at 23.

<sup>35</sup> The FCC outlined four policy factors that guided its decision:

- 1) the increasing integration of innovative broadband technology into the existing wireline platform [e.g., promoting innovation]
  - 2) the growth and development of entirely new broadband platforms [e.g., encouraging investment]
  - 3) the flexibility to respond more rapidly and effectively to new consumer demands [e.g., benefiting consumers]
  - 4) our expectation of the availability of alternative competitive broadband transmission to the currently required wireline broadband common carrier offerings. [e.g., stimulating broadband].
- Id.* at 43, (bracketed comments added )

<sup>36</sup> *Id.* at 35.

Of course, network neutrality proponents would argue that the operators' real need is to maximize revenues and profits rather than simply traffic volume and that those needs will encourage discrimination.

The FCC also suggested that removing Internet access from a common carrier regime will encourage innovative pricing arrangements that will, in turn, benefit innovative Internet start-ups. It observed:

Non-common carriage contracts will permit ISPs to enter into various types of compensation arrangements for their wireline broadband Internet access transmission needs that may better accommodate their individual market circumstances. For example, ISPs and facilities-based carriers could experiment with revenue-sharing arrangements or other types of compensation-based arrangements keyed to the ISPs' marketplace performance, enabling the ISPs to avoid a fixed monthly recurring charge (as is typical with tariffed offerings) for their transmission needs during start-up.<sup>37</sup>

Opponents of network neutrality regulation echo this rationale when they suggest that the "incumbent" Internet and e-commerce companies (such as Google, Skype and Yahoo!) want to subject network operators to common carrier-type non-discrimination regulations to make it more difficult for operators to help new start-ups to compete with them.

The FCC believes that it should be encouraging investment in innovative new technologies, concluding that:

...eliminating the *Computer Inquiry* rules at this time will make it more likely that wireline network operators will take more risks in investing in and deploying new technologies than they are willing and able to take under the existing regime. Tailored private contractual agreements, in general, provide service providers more flexibility in developing a new technology and more incentives to do so.<sup>38</sup>

Network neutrality proponents would argue, however, that the FCC is being shortsighted and even misguided. They argue that it is equally or even more important to encourage investment in and deployment of new technology at the "edge" of the network rather than in the "core." They point out that the real drivers of the Internet have been and will be applications (i.e., Google, YouTube) and e-commerce models (i.e., eBay) and these innovations will be stimulated by requiring network operators to be non-discriminatory. Minimally, they would suggest that the FCC shouldn't be discouraging "edge" innovation by removing the *Computer III*-type of protections.

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<sup>37</sup> Wireline Broadband Framework, note 29, *supra*, at 48. The FCC also observed:

The ability to deliver such innovative services over their platforms in order to attract customers will likely motivate wireline facilities-based broadband transmission providers to negotiate mutually beneficial arrangements that enable the wireline facilities-based broadband transmission provider to share the financial rewards of bringing the new Internet access applications or services to consumers. *Id.*

<sup>38</sup> *Id.* at 39.

A major overall policy objective of the FCC is encouraging deployment of broadband infrastructure by, among other things, making investment more attractive. With this policy in mind, the Commission concluded that:

... the inability to customize broadband service offerings inherent in the nondiscriminatory access requirement impedes deployment of innovative wireline broadband services taking into account technological advances and consumer demand. Thus,...such requirements...would deprive consumers of more efficient and innovative enhanced services. Similarly, a continued obligation to provide any new broadband transmission capability to all ISPs indiscriminately...would reduce incentives to develop innovative wireline broadband capabilities...<sup>39</sup>

## **B. FCC'S BROADBAND POLICY STATEMENT (SEPT. 23, 2005)**

On the same day the FCC released its *Wireline Broadband Framework* Order it also released a Policy Statement to address the concerns raised in the *Framework* proceeding about the loss of common carrier protections that would result from the reclassification of telephone companies' DSL Internet access as an information service. This Policy Statement was an update and formalization of the "Four Freedoms" outlined by the prior Chairman of the Commission, Michael Powell.

Specifically the FCC Broadband Policy Statement said:

- ...to ensure that broadband networks are widely deployed, open, affordable, and accessible to all consumers, the Commission adopts the following principles:
- *To encourage broadband deployment and preserve and promote the open and interconnected nature of the public Internet*, consumers are entitled to access the lawful Internet content of their choice.
  - *To encourage broadband deployment and preserve and promote the open and interconnected nature of the public Internet*, consumers are entitled to run applications and use services of their choice, subject to the needs of law enforcement.
  - *To encourage broadband deployment and preserve and promote the open and interconnected nature of the public Internet*, consumers are entitled to connect their choice of legal devices that do not harm the network.
  - *To encourage broadband deployment and preserve and promote the open and interconnected nature of the public Internet*, consumers are entitled to competition among network providers, application and service providers, and content providers.<sup>40</sup>

The Commission then stated that it "... will incorporate the above principles into its ongoing policymaking activities" with an important two-point footnote proviso:

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<sup>39</sup> *Id.* at 53.

<sup>40</sup> FCC Policy Statement, FCC 05-151, released. Sept. 23, 2005, [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/FCC-05-151A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-05-151A1.doc). (italics in original)

Accordingly, we are not adopting rules in this policy statement. The principles we adopt are subject to reasonable network management.<sup>41</sup>

### **C. FCC MERGER CONDITIONS PROVIDE ANOTHER VEHICLE FOR NETWORK NEUTRALITY REGULATION**

Network neutrality concerns were stimulated at least in part by the consolidation of the telecom and cable industries during the past decade. Activists and telecommunications-dependent businesses were always concerned that the consolidation would increase network providers' market power and lead to less competition and higher prices.

"Network neutrality" was another name for these concerns.

Before approving a merger or similar transaction involving major telecommunications companies, the FCC has typically required the merging companies to offer a series of conditions regarding their post-merger behavior. Many of these merger conditions deal with competition issues and it was therefore quite natural that conditions would be sought and offered concerning "network neutrality" once the term came into popular use. The Verizon-MCI and SBC-AT&T mergers provided the first opportunity to address network neutrality in the context of a merger condition. The FCC's orders approving the transaction included one condition relating to network neutrality:

#### Net Neutrality

Effective on the Merger Closing Date, and continuing for two years thereafter, Verizon/MCI will conduct business in a manner that comports with the principles set forth in the FCC's Policy Statement, issued September 23, 2005 (FCC 05-151).<sup>42</sup>

Shortly after the MCI-Verizon and SBC-AT&T mergers were approved by the FCC, but before the Orders were released, the Chairman of SBC (now AT&T) made a comment in Business Week that inflamed the "network neutrality" debate. According to the article:

Pressed on the threat from these Web upstarts, Whitacre leans forward in his chair and raises his voice. "They don't have any fiber out there. They don't have any wires. They don't have anything," he argues. "They use my lines for free -- and that's bull. For a Google or a Yahoo! or a Vonage or anybody to expect to use these pipes for free is nuts!"<sup>43</sup>

Most recently, three network neutrality conditions were included in connection with the merger of AT&T (formerly SBC) with BellSouth that was approved by the FCC at the

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<sup>41</sup> *Id.*

<sup>42</sup> Order Approving Verizon-MCI Merger, released Nov. 17, 2005, [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/FCC-05-184A1.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-05-184A1.pdf); the same condition was included in SBC-AT&T Merger order released Nov. 17, 2005, [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/FCC-05-183A1.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-05-183A1.pdf)

<sup>43</sup> See, [http://www.businessweek.com/magazine/content/05\\_45/b3958089.htm](http://www.businessweek.com/magazine/content/05_45/b3958089.htm)

very end of 2006. The first condition agreed to by AT&T simply repeated its earlier commitment to respect the FCC's Broadband Policy Statement:

1. Effective on the Merger Closing Date, and continuing for 30 months thereafter, AT&T/BellSouth will conduct business in a manner that comports with the principles set forth in the Commission's Policy Statement, issued September 23, 2005 (FCC 05-151).<sup>44</sup>

The second commitment is a much more specific network neutrality commitment applicable to AT&T's wireline (but not to wireless) Internet access:

2. AT&T/BellSouth also commits that it will maintain a neutral network and neutral routing in its *wireline broadband Internet access service*. This commitment shall be satisfied by AT&T/BellSouth's agreement not to provide or to sell ...any service that privileges, degrades or prioritizes any packet transmitted over AT&T/BellSouth's wireline broadband Internet access service based on its source, ownership or destination.<sup>45</sup>

However, AT&T made it perfectly clear that “neutrality” would NOT be applicable to business services and to its developing IPTV service:

3. This commitment does not apply to ... enterprise managed IP services,... This commitment also does not apply to AT&T/BellSouth's Internet Protocol television (IPTV) service.<sup>46</sup>

Thus, AT&T's merger commitments established the “two-tier” Internet feared by proponents of network neutrality: a “neutral” low-speed, conventional Internet and a non-neutral sophisticated, high capacity Internet. Many observers believe that this two-tier arrangement is a precedent for the outcome of any overall network neutrality regulations:

Not only is there a framework for language, the [AT&T-BS merger] condition also provides a structure for how to address the issue. It essentially obligates the company to offer a service (broadband Internet access) for which traditional common-carrier-like network neutrality rules would apply, while exempting from those obligations other services (such as enterprise VPN, mobile wireless, IPTV, etc.) for which policymakers do not see a need for non-discrimination.<sup>47</sup>

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<sup>44</sup> AT&T Merger Commitments attached to AT&T's Dec. 28, 2006 letter to FCC. The letter was attached to the FCC's Dec. 29 press release announcing approval of the merger, [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DOC-269275A1.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-269275A1.pdf)

<sup>45</sup> *Id.*, italics added.

<sup>46</sup> *Id.*

<sup>47</sup> Stifel Nicolaus “Washington Telecom Weekly,” Jan. 5, 2007

#### **D. FCC ENFORCEMENT ACTION PROVIDES A VENUE FOR RESOLVING NET NEUTRALITY ISSUES ON A CASE-BY-CASE BASIS.**

Opponents of network neutrality regulation often suggest that it would be better to “wait and see” if any problems develop and then have regulators respond to specific instances of abuse. Supporters of network neutrality often express concern that the regulatory process isn’t fast enough to stop abusive practices before considerable damage is done.

In early 2005, Vonage determined that Madison River Telephone Co., a small rural telephone company, was preventing its DSL customers from accessing Vonage’s VoIP service, presumably to protect Madison River’s conventional telephone service from competition. The FCC reacted with amazing speed to stop Madison River from blocking access to Vonage. The Commission’s Enforcement Bureau opened an investigation on February 11, 2005 and by March 3 had negotiated a settlement where:

...the Bureau requires, and Madison River agrees, that Madison River shall not block ports used for VoIP applications or otherwise prevent customers from using VoIP applications.<sup>48</sup>

It is worth noting that this enforcement action was brought as a violation of a common carrier obligation under Sec. 201(b) which requires that:

All charges, practices, classifications, and regulations for and in connection with such communication service, shall be just and reasonable, and any such charge, practice, classification, or regulation that is unjust or unreasonable is hereby declared to be unlawful.<sup>49</sup>

Shortly after the *Madison River* decision, the FCC decided that a telephone company’s DSL Internet access service—the service at issue in the case—is an information service subject to Title I of the Communications Act, not a common carrier service subject to Title II (including Sec. 201).<sup>50</sup>

However, the reclassification of DSL as an information service does not mean that the FCC would be indifferent to the sort of blocking conducted by Madison River. In the reclassification proceeding (*Wireline Broadband Framework*), the Commission said:

While we agree that actively interfering with consumer access to any lawful Internet information, products, or services would be inconsistent with the statutory goals of encouraging broadband deployment and preserving and promoting the open and interconnected nature of the public Internet, [citing to *Broadband Policy Statement*] we do not find sufficient evidence in the record before us that such interference by facilities-based wireline broadband Internet access service providers or others is currently occurring.... Should we see

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<sup>48</sup> FCC Consent Decree, DA 05-543, March 3, 2005

<sup>49</sup> 47 U.S.C. 201(b)

<sup>50</sup> See discussion of *Wireline Broadband Framework* at pp. 11-13, *supra*.

evidence that providers of telecommunications for Internet access or IP-enabled services are violating these principles, we will not hesitate to take action to address that conduct.\*

\* Federal courts have long recognized the Commission's authority to promulgate regulations to effectuate the goals and accompanying provisions of the Act in the absence of explicit regulatory authority, if the regulations are reasonably ancillary to the effective performance of the Commission's various responsibilities. [citations omitted]<sup>51</sup>

## **E. THE FTC WEIGHS IN**

In addition to the FCC, the Federal Trade Commission (FTC) has taken an interest in network neutrality. The FTC's interest is driven by its responsibilities for encouraging competition and for consumer protection.

At a speech in August 2006, the FTC's chairman, Deborah Platt Majoras, announced the formation of an Internet Access Task Force. She said:

The FTC's Internet Access Task Force is looking carefully at the issues raised by calls for network neutrality laws . . . I urge caution in proceeding on the issue. I... question the starting assumption that government regulation, rather than the market itself under existing laws, will provide the best solution to a problem.

While I am sounding cautionary notes about new legislation, let me make clear that if broadband providers engage in anticompetitive conduct, we will not hesitate to act using our existing authority. But I have to say, thus far, proponents of net neutrality regulation have not come to us to explain where the market is failing or what anticompetitive conduct we should challenge; we are open to hearing from them.”

The FTC held a two-day workshop on Broadband Connectivity Competition Policy on February 13-14, 2007 featuring leading proponents and opponents of net neutrality regulation.<sup>52</sup> The testimony presented at the hearing was not available in time to be incorporated into this paper<sup>53</sup> but trade press reports indicate that the FTC Commissioners were disappointed by the strong rhetoric and intransigence of the opposing parties.

## **F. TEXAS PUBLIC UTILITIES COMMISSION'S VIEW OF NETWORK NEUTRALITY IS CONSISTENT WITH FCC AND FTC VIEWS.**

“Network neutrality” is not just a Federal issue. A number of States, including Texas, have indicated a strong interest in the issue. In response to a directive from the legislature to investigate the issue, the Public Utility Commission of Texas reported:

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<sup>51</sup> Wireline Broadband Framework, note 29, *supra*, at 52.

<sup>52</sup> The Workshop agenda is available at <http://www.ftc.gov/opp/workshops/broadband/agenda.pdf>

<sup>53</sup> A transcript is available at [http://htc-01.media.globix.net/COMP008760MOD1/ftc\\_web/FTCindex.html](http://htc-01.media.globix.net/COMP008760MOD1/ftc_web/FTCindex.html)

...no evidence exists to date that any broadband provider has yet affected any customer choice issues that are addressed in this report. Additionally, the Commission notes that the current status of Internet-enabled applications is generally within the jurisdiction of the Federal Communications Commission (FCC).<sup>54</sup>

As a result of not finding a current problem, the PUC recommended no action by the legislature:

At this time, the Commission finds no compelling reasons to recommend that the Texas Legislature add specific statutory language to PURA to address the issue of customer choice for Internet-enabled applications employed in association with broadband services. However, should the legislature decide to add language to PURA for this purpose, the Commission believes such language should be consistent with the Federal Communications Commission (FCC) Four Principles of Network Neutrality Policy Statement.<sup>55</sup>

## **G. CONGRESS IS INVOLVED**

In 2006, a number of net neutrality bills were considered by Congress.<sup>56</sup> One of the first bills introduced in the 110<sup>th</sup> Congress in January 2007 was the Internet Freedom Preservation Act (S. 215). Its principal authors are Sens. Byron Dorgan (D-ND) and Olympia Snow (R-ME). These Senators had introduced similar legislation in the previous Congress. Other than Sen. Snowe—a “liberal Republican”—all the other co-sponsors are leading liberal Democratic legislators (Sens. Clinton, Obama, Kerry, Boxer, Harkin, Leahy, and Wyden), giving the bill a rather partisan cast.

One law firm with an extensive telecommunications practice summarized the bill as follows:

This bill would require broadband service providers to operate their networks in a nondiscriminatory manner, but it would still permit them to offer different connection levels to customers. The bill would also prohibit mandatory broadband bundling. The bill would also require the FCC to establish rules governing net neutrality complaint proceedings and would set a 90-day limit for FCC action on such complaints.<sup>57</sup>

Most pundits don't expect any significant telecom legislation—particularly bills dealing with “net neutrality”—to be enacted during this Congress. (Cynics would say that “net

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<sup>54</sup> Texas PUC Report to Legislature, Dec. 2006, (Commissioner's cover letter dated Nov. 22, 2006)

<sup>55</sup> *Id.*, Executive Summary

<sup>56</sup> See, e.g., National Journal's Insider Update, <http://njtelecomupdate.com/lenya/telco/live/tb-PDTS1139842211727.html> for articles on the various Congressional activities related to net neutrality.

<sup>57</sup> Morrison & Foerster, Communications Law Bulletin, Jan. 2007

neutrality” is on the Congressional agenda simply to encourage the wealthy stakeholders to continue making substantial campaign contributions.)

#### **IV. SO, WHO IS *FOR* NETWORK NEUTRALITY REGULATION?**

An Internet search engine inquiry for “network neutrality” returns links to hundreds of papers and articles by proponents and opponents of network neutrality. This section of the paper is not, therefore, intended to catalog all of the activists on both sides of the issue.

Broadly, there are two major classes of “pro” network neutrality stakeholders:

- 1) **activists and advocates** who see the issue primarily as a free speech (can the network operator censor or charge differently depending on the type of content?) or social issue (all citizens should have Internet access in order to participate equally in the net-centric economy and political discourse); and,
- 2) **content providers and e-commerce companies**, who see the issue as primarily economic (can the network operators charge more?) and competitive (can the network operators give preferential service or prices to their own version of the content or to a favored competitor?)

The supporters of network neutrality operate individually and in broad coalitions. For example, with respect to the “Save the Internet Coalition:

...founding members of the Coalition, include[e] Free Press, Consumers Federation of America, Moveon.org Civic Action, Consumers Union, Public Knowledge, Common Cause, US PIRG/State PIRGs, United Church of Christ, Media Access Project, Afro-Netizen, Educause, Benton Foundation, Center for Creative Voices in Media, Internet2 and Democracy for America...<sup>58</sup>

It should be noted that the members of this coalition are not exclusively “liberal” politically. Gun Owners of America and the Christian Coalition are also members out of concern that, without net neutrality, their ability to communicate their political views would be hampered.

This coalition recently adopted the “Internet Freedom Declaration of 2007” which states:

The Internet has become a vital engine for democratic participation, economic innovation and free speech. As the Internet becomes our public square and economic marketplace, Internet access must be regarded as a civil right for all Americans. The attempt by some to act as Internet gatekeepers imperils the social and economic promise that the Internet holds for our future...<sup>59</sup>

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<sup>58</sup> Savetheinternet.com Coalition, <http://www.savetheinternet.com/blog/>, Jan. 20, 2007

<sup>59</sup> Savetheinternet.com Coalition, <http://www.savetheinternet.com/=declaration>

Another activist organization says that "...the principle of network neutrality represents our last, best hope of preserving a vital noncommercial, civic core in an online environment that grows more commercialized every day. ... But for the full potential of the broadband era to be realized, we will need to have a strong policy of network neutrality in place."<sup>60</sup>

Prominent supporters of net neutrality from the content and e-commerce community include:

- E-Bay and Skype
- Amazon
- Google
- Microsoft
- Yahoo!

Numerous academics, consultants and lobbyists also promote and support network neutrality regulations.

## V. AND WHO IS AGAINST NETWORK NEUTRALITY REGULATION?

Each of the network operators is very active on its own behalf opposing network neutrality regulations. In addition, they have their own coalitions. One of them is the NetCompetition.Org, whose members include:

**Cable:** American Cable Association, National Cable and Telecommunications Association; Comcast; Time Warner Cable;

**Telephone:** US Telecom Association; AT&T, Verizon, Qwest

**Wireless:** Cellular Telecommunications Association; Wireless Communications Association; Verizon Wireless; Sprint

Not surprisingly, the opponents of network neutrality regulations are well satisfied with the *status quo*. As the head of the telephone industry's trade association explained:

The Internet is the success it is today because the government has maintained a vigilant, but hands-off approach that has allowed companies to innovate in direct response to the evolving wants and needs of their customers. Regulatory or legislative solutions wholly without justification in marketplace activities would stifle, not enhance the Internet. Laws can be inflexible and difficult to fine-tune—particularly when applied to technologies that are rapidly evolving. Instead of new

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<sup>60</sup> Center for Digital Democracy, "Life in the Slow Lane: A Guide to the *Un*-Neutral Net," <http://www.democraticmedia.org/issues/UNN.html>

laws, we believe in the discipline of the marketplace – customers voting with their dollars – alongside the continued, proven vigilance of the FCC.<sup>61</sup>

In addition, the opponents of network neutrality often cite the need to have an environment that encourages network operators to continue making substantial investments in the “next generation” Internet. They contend that network neutrality regulations that protect the interests of the e-commerce sector would inhibit broadband infrastructure investment to the detriment of the economy and society as a whole.<sup>62</sup>

Not surprisingly, numerous academics, consultants and lobbyists also oppose network neutrality regulations. Significantly, some leading Internet experts have expressed considerable doubt about the wisdom of premature net neutrality regulation. For example, Robert Kahn, co-inventor of the TCP/IP protocol observed:

If the goal is to encourage people to build new capabilities, then the party that takes the lead is probably only going to have it on their net to start with and it's not going to be on anyone else's net. You want to incentivize people to innovate, and they're going to innovate on their own nets or a few other nets.  
...I am totally opposed to mandating that nothing interesting can happen inside the net...<sup>63</sup>

## **VI. IF “MARKET POWER” IS THE ROOT PROBLEM, CAN GREATER BROADBAND COMPETITION ASSUAGE NETWORK NEUTRALITY CONCERNS?**

The history of telecommunications regulation has been the history of government intervention to prevent or at least mitigate the adverse consequences of carriers’ “market power” which has typically resulted from a carrier’s control of the “last mile” connection between the user and broad telecom network. The 1982 Consent Decree that broke up the Bell System and the Telecommunications Act of 1996 are but two significant examples.

As the market power of network operators has changed from the total monopoly pre-1960s to the broad although imperfect competition of today, policies based on the degree of market power have changed. For example, the FCC justified its virtual abolition of the *Computer Inquiry* on such a change of circumstances. The Commission said:

...we determine that the competitive pressures and technological changes that have arisen since 1990 have reduced the BOCs’ incentive and ability to discriminate against unaffiliated ISPs in their provision of broadband Internet access service...<sup>64</sup>

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<sup>61</sup> Senate Testimony of Walter B. McCormick, Jr., President & CEO, United States Telecom Assoc., Feb. 7, 2006

<sup>62</sup> *Id.*

<sup>63</sup> The Register, Jan. 17, 2007. [http://www.theregister.co.uk/2007/01/18/kahn\\_net\\_neutrality\\_warning/](http://www.theregister.co.uk/2007/01/18/kahn_net_neutrality_warning/)

<sup>64</sup> Wireline Broadband Framework, note 29, *supra*, at 26

... We fully recognize that not all American households can choose between cable modem and DSL-based Internet access service today. ... There are, however, other existing and developing platforms, such as satellite and wireless, and even broadband over power line in certain locations, indicating that broadband Internet access services in the future will not be limited to cable modem and DSL service.<sup>65</sup>

Some of the strongest proponents of network neutrality regulations agree that such regulations wouldn't be required if there was sufficient competition to curtail the "last mile" market power that permits discrimination. For example, Google's chief network neutrality spokesperson said:

The best long-term answer to this problem is significantly more broadband competition...

Most consumers face few choices among broadband carriers, giving carriers tremendous market power. ... As a result, carriers increasingly will have an economic incentive to use their power to block competitors, seek extra payments to ensure that Internet content can be seen, and generally control consumer activity online.

Were there sufficient competition among and between various broadband networks, Google's concerns about the future of the Internet would largely be allayed. Unfortunately, ... nearly half of all consumers lack meaningful choice in broadband providers.<sup>66</sup>

Of course, opponents of network neutrality rules agree with the FCC that there is already more than enough broadband competition to ameliorate any market power and discrimination concerns. A spokesperson for the telephone service industry said:

In a new communications era defined by multiple choices—multiple communications pathways—consumers simply will not continue to purchase service from a provider that seeks to block or restrict their Internet access. When consumers have choices in the marketplace, consumers have control. There is vigorous competition between DSL, cable modem, wireless, satellite, and other Internet access providers.<sup>67</sup>

Market power (and discrimination) can be brought to bear in only portions of an overall larger market. It is true that "wireless Internet access" is growing rapidly and, based solely on the number of users, it would appear that the much feared cable-telco broadband duopoly is threatened by wireless broadband.<sup>68</sup> However, the bandwidth

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<sup>65</sup> Id., at 28-29.

<sup>66</sup> Senate Testimony of Vint Cerf, Vice President and Chief Internet Evangelist, Google, Feb. 7, 2006

<sup>67</sup> Senate Testimony of Walter B. McCormick, Jr., President & CEO, United States Telecom Assoc., Feb. 7, 2006

<sup>68</sup> See, e.g., Morgan Stanley, "Speed Is Key as Broadband Market Matures," Jan. 26, 2007

required for new video-oriented services (e.g., streaming video, YouTube, IPTV, videoconferencing, etc.) may overwhelm wireless broadband services, meaning that the market power and discrimination potential of the cable-telco duopoly may be untouched. This potential was described by one Wall Street analyst who observed that:

...the debate will end up being largely about high-bandwidth real-time uses, such as live or interactive video and gaming. As such, it could be that there will be increasing “broadband” competition but, for some significant time, only two local broadband providers capable of facilitating video, gaming, and other high-bandwidth real-time uses. If wireless or some other technology cannot eventually offer such a high bandwidth pipe, it could drive network neutrality concerns to move from broadband, generally, to “big” broadband networks, particularly.<sup>69</sup>

## VII. WHAT’S NEXT?

In the near-term, the answer is probably “nothing...just more rancorous debate.” This answer, of course, assumes that there are no (or very few) instances of actual network neutrality problems of the *Madison River* sort. Two major network operators (Verizon and AT&T) are bound by merger conditions that require adherence to the FCC’s “Broadband Policy Statement” and nearly every other Internet access supplier has stated that they will comply with the FCC policy, so the prospect of another *Madison River* is slight. In the absence of a broad public outcry that another *Madison River* might engender, Congress is unlikely to act until after the next Presidential election, at the earliest.

This does not mean that the *status quo* will prevail for the foreseeable future. If Network Neutrality is regarded as merely the next phase of the on-going 30-year *Computer Inquiry* saga, then it would be reasonable to assume a continuation of the periodic adjustments based on technology, market and market power changes. Such a future has been suggested by astute Wall Street analysts, who noted:

...in the early days of the Internet, the government’s “enhanced service provider exemption” gave Internet service providers (ISPs) leverage with telco networks, creating an opportunity for companies such as AOL and EarthLink to grow in a narrowband world. As broadband emerged, the government largely rejected AOL’s “open access” campaign and eased telco regulation, shifting leverage back to the telcos and cable over the ISPs.

Government action was based on fact-specific situations and does not, in our view, provide reliable indicators of how it will react to the current network-edge battle. ***History does suggest, however, that government is willing to wade into these value-chain disputes to shift the negotiating leverage, and further, that it also has been willing to reverse its policy direction if it thinks that the leverage has shifted too far in one direction.*** Thus, network neutrality should not be seen

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<sup>69</sup> Stifel Nicolaus, “Net Neutrality: Value Chain Tug of War,” March 2006

as a one-time debate in which a single decision will resolve every issue permanently.<sup>70</sup>

And the FCC has clearly stated that it's current policy can and will be changed in response to changing circumstances. It said:

The Commission is free to modify its own rules at any time to take into account changed circumstances. ... As such, in our discretion, subject to reasoned explanation, we are free to alter the policy judgment reflected in those requirements based on our assessment of their relevant costs and benefits in light of changed technological and market conditions.<sup>71</sup>

## CONCLUSION

Network Neutrality is not a new issue. It is just the latest in a series of disputes about market power and discrimination that started with the invention of the telephone more than 100 years ago. Since the beginning of the "convergence" of computers and telecommunications 30 years ago, the FCC (and Congress and the States to lesser extents) have been periodically adjusting policy regarding the involvement of network operators in "computer" services. When the power of the network operators was substantially greater than that of the computer services sector, the government's policy was first to exclude and then to substantially regulate the network operators' involvement in "computer" services. As the size and strength of the computer services sector increased rapidly relative to network operators toward the end of the 20<sup>th</sup> century with the flowering of the "Internet Age" and the advent of competition in the telecommunications sector, the restrictions on the network operators were virtually removed. Proponents of "Network Neutrality" regulations believe that the balance between "telecom" and "computer" has tipped too far in the direction of "telecom" and they are therefore suggesting reversing the trend. Opponents think the balance is just fine. Time will tell who is right.

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<sup>70</sup> Stifel Nicolaus, "Net Neutrality: Value Chain Tug of War," March 2006 (emphasis supplied)

<sup>71</sup> Wireline Broadband Framework, note p.29, *supra*, at 44.