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### The Net Neutrality Debate in the United States

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## The Net Neutrality Debate in the United States

Jeffrey A. Hart

**ABSTRACT.** In 2006, a major telecommunications bill was held up because it did not include guarantees for something called “net neutrality.” Republicans strongly opposed these guarantees, while Democrats strongly favored them. The debate over net neutrality continued during the long campaign leading up to the 2008 presidential election. When the Obama Administration took office in 2009, the new chairman of the Federal Communications Commission, Julius Genachowski revived the idea of codifying net neutrality rules. In April 2010, the U.S. Court of Appeals in the District of Columbia Circuit ruled that the FCC did not have the authority to regulate Internet service providers under its own interpretation of the Telecommunications Act of 1996. The FCC adopted a new strategy because of the Court’s action. It opted not to undertake a major revision of the Telecommunications Act, but instead to attempt to regulate Internet service provision under modified “common carriage” rules, just as basic telephone services had been previously. An attempt will be made here to explain these choices.

**KEYWORDS.** FCC, internet, net neutrality, regulation debate, United States

In 2006, a major telecommunications bill failed because it did not include guarantees for something called “net neutrality.” The political coalition in favor of net neutrality included an odd assortment of interests including the American Civil Liberties Union, the Christian Coalition of America, the Gun Owners of America, the American Library Association, and the Consumers Union, along with Internet businesses such as Google, Amazon.com, and Yahoo!, and interest groups such as the American Electronics Association and the Communications Workers of America.

The opposing coalition included the major telephone and telecommunications equipment

companies, cable operators, and an assortment of technologists, conservative economists, and politicians who argued that net neutrality guarantees would constitute a new form of government regulation that could ruin the Internet by reducing incentives to build broadband infrastructure and giving unfair advantages to already large content and applications providers such as Google and Yahoo!.

Those in favor of net neutrality argued for the necessity of regulating the actions of the owners of Internet infrastructure in order to preserve the Internet as a forum for free speech, prevent the potential abuse of market power by

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telephone and cable companies, and promote Internet-based economic innovation.

The purpose of this article is to describe and explain the politics behind the U.S. net neutrality debate of the period between 2006 and 2010 and to predict its likely future course. The main questions to be addressed are as follows:

1. What are the main factors explaining the emergence of support for and opposition to net neutrality guarantees?
2. How are politics in this area related to the broader debates over regulation and the role of the state in American politics?
3. To what extent did outcomes depend on which party controlled the White House and/or Congress?
4. How did the two main parties frame the issue?
5. Was there evidence that the political influence of Internet-based services such as Google, Amazon, and Yahoo! was growing over time?
6. Going beyond the struggle between groups with differing interests, what role did considerations of the broader public interest play in the debates?

This is a theoretically driven case study of a national debate over who gets access to broadband digital infrastructure and under what conditions and terms. As such, and in conjunction with similar case studies of the universe of debates over net neutrality, it might contribute to theories about the politics of digital infrastructures. There should be no question that the case of the U.S. debate over net neutrality is an important case and therefore deserves careful description. While the main method used here is the construction of a historical narrative using the best available sources, it is expected that future research will involve careful comparison of multiple cases.

### ***ORIGINS OF THE DEBATE***

The debate over net neutrality began with digitization: the progressive migration of everything that was once analog—text, symbols,

audio, and video—toward creation, storage, and transmission in digital formats. The telephone networks were designed originally for the transmission of analog audio signals, but conversion of those signals to digital permitted more efficient use of telephone networks and hence less expensive services. Cable television networks were designed originally for the transmission of analog TV signals, but the same logic made it desirable for cable operators to switch over to digital signal formats and transmission technologies. The rise of the Internet, and particularly the broadband-capable Internet, made it possible to create, store, and transmit just about anything in digital format.

In the meantime, the federal government had regulated various communications services separately because of their initially different characteristics. Telephone networks were regulated as “common carriers” just as highways, ocean shipping, and the postal system had been. This guaranteed that no one could be denied access to vital communications and transportation infrastructures. It also helped to prevent the abuse of monopoly power of dominant network providers. Additional efforts were made to assure that as many people as possible would have access to the telephone network despite the high costs of connecting people in remote locations in the form of “universal service” provisions of the law (Mueller, 1997).

Television broadcasting was regulated in a completely separate legal regime that focused on the responsibility of broadcasters to serve the public in various ways defined by legislation. Cable television was extensively deregulated during the Reagan Administration to promote the building and upgrading of cable networks. By the end of the 1990s, more than 70 percent of U.S. households got their TV signals via the cable networks.

In the Telecommunications Act of 1996, Congress provided incentives to both telephone and cable companies to compete with one another to build their separate telecommunications infrastructures and, if possible, to offer competing digital telecommunications services. Initially, telephone companies stuck to telephone services, and cable companies stuck to providing TV programming to customers. They

both, however, began to experiment with offering data access services as a sideline to their main businesses. Dial-up access to the Internet via the telephone network was still the preferred method for consumers, while people in offices and universities began to have other and better means to access the Internet.

By the end of the 1990s, the cable companies were ahead of the telephone companies in offering broadband Internet connectivity to customers via cable modems. A few years later, the telephone companies began to offer DSL (digital subscriber line) services to compete with the cable companies. By 2005, most Americans who had broadband connections to the Internet were doing so via cable modems or DSL.<sup>1</sup> Growth in telephony and traditional cable TV revenues for both telephone and cable companies had begun to flatten out by then, so both were pleased to see rapid growth in revenues for broadband services (see Table 1).

In the late 1990s, the issue of “open access” to the Internet arose as a result of proposed mergers between telephone companies and cable operators. In 1999, AT&T’s merger with Telecommunications, Inc. (TCI) raised fears of a large and vertically integrated Internet service provider. The acquisition of Time Warner by AOL in January 2000 raised similar concerns. Scholars wondered whether the unbundled access to telecommunications services at the “local loop” that applied to telephone companies should also apply to cable operators who were just then beginning to deploy broadband

services over their networks (Bar & Riis, 2000; Lemley & Lessig, 2001; Noam, 1994).

The Republicans who came to power in 2000 were not interested in preserving the benefits of common carriage regulation for telephone customers or requiring the telephone and cable networks to offer unbundled access to the local loop. Instead, they believed that the best way to build the broadband infrastructure was to foster competition between cable and telephone companies and to keep regulation of both to a minimum. (Mueller, n.d.) One of the results of this new philosophy was the FCC’s decision in 2003 to release telephone companies from the obligation to share their digital infrastructure with other companies via the unbundling of DSL services, thus gravely undermining the principles of common carriage and universal service. A similar decision was made when the FCC labeled cable-modem services “information services” that did not need to be regulated under the Telecommunications Act of 1996. The U.S. Supreme Court upheld the latter decision in 2005 (U.S. Supreme Court, 2005).

### THE BIRTH OF NET NEUTRALITY

On November 18, 2002, a coalition of high-tech firms including Amazon.com, eBay, Yahoo!, Disney Corporation, and Microsoft called the Coalition of Broadband Users and Innovators (CBUI) sent a letter to FCC Chairman Michael Powell urging the FCC to “assure that consumers and other Internet users continue to enjoy the unfettered ability to reach lawful content and services.” Members of the CBUI used the phrase “net neutrality” to refer to an idea originally discussed in an essay written in 2002 by Professor Tim Wu of Columbia Law School and published in 2003 (Wu, 2003). The CBUI wanted the FCC to adopt “nondiscrimination safeguards” to guarantee net neutrality (Coalition of Broadband Users and Innovators, 2002).

Lawrence Lessig and Robert W. McChesney define net neutrality in the following manner:

Net neutrality simply means that all like Internet content must be treated alike and

TABLE 1. Telecommunications Revenues by Sector, 2005

Type of service	Total revenues (in \$ billions)	Type of growth
Enterprise long distance and data	80	Flat
Enterprise local voice	40	Flat
Consumer fixed voice	80	Shrinking
Consumer broadband	15	Growing rapidly
Wireless	100	Growing rapidly
Video	50	Growing

Source: Robert Gensler, T. Rowe Price, as cited in Entman (2005), p. 9.

move at the same speed over the network. The owners of the Internet's wires cannot discriminate. This is the simple but brilliant "end-to-end" design of the Internet that has made it such a powerful force for economic and social good. (Lessig & McChesney, 2006)

Eli Noam argues that there are multiple possible meanings of "net neutrality":

1. No different quality grades ("fast lanes") for Internet service
2. No price discrimination among Internet providers
3. No monopoly price charged to content and application providers
4. Nothing charged to providers for transmitting their content
5. No discrimination [against] content providers who compete with the carrier's own content
6. No selectivity by the carriers over the content they transmit
7. No blocking of the access of users to some websites. (Noam, 2006)

Noam argues further that the last two definitions are important from the perspective of preserving freedom of speech and preventing censorship of unpopular ideas. Most advocates of net neutrality are not asking for free access to the Internet for users or service providers, however, so the essence of the concept is nondiscrimination by carriers (owners of the infrastructure) with respect to content, applications, and content/application providers.

#### ***FOUR PRINCIPLES, FOUR FREEDOMS***

In September 2003, the High Tech Broadband Coalition<sup>2</sup> sent a document to the FCC entitled "Broadband Principles for Consumer Connectivity." This document called for minimal regulation of broadband services to protect consumer and provider interests. It argued for four main principles:

1. Consumers should receive meaningful information regarding their broadband services plans.
2. Broadband consumers should have access to their choice of legal Internet content within the bandwidth limits and quality of service of their service plan.
3. Broadband consumers should be able to run applications of their choice, within the bandwidth limits and quality of service of their service plan, as long as they do not harm the provider's network.
4. Consumers should be permitted to attach any devices they choose to the broadband connection at the consumer's premises, so long as they operate within the bandwidth limits and quality of service of their service plans, and do not harm the provider's network or enable theft of services. (High Tech Broadband Coalition, 2003, p. 1)

The phrase "within the bandwidth limits and quality of service of their service plan" was included to protect the providers against "bandwidth hogs" who might degrade the service quality of others by engaging in activities that stretched the network beyond its capacity. Similarly, the providers wanted protection against consumer or service provider actions that threatened the integrity of the network and/or outright theft of services.

FCC Chairman Michael Powell delivered an address on February 8, 2004, in which he articulated his ideas for four "Internet Freedoms:"

1. Freedom to access content
2. Freedom to use applications
3. Freedom to attach personal devices
4. Freedom to obtain service plan information (Powell, 2004, p. 5)

These four freedoms coincided closely with the four principles elaborated in the document prepared by the High Tech Broadband Coalition, with a slight change of order.

The FCC adopted a Policy Statement in August 2005 that included four "principles" that were modified versions of Powell's four freedoms:

1. . . . consumers are entitled to access the lawful Internet content of their choice.
2. . . . consumers are entitled to run applications and services of their choice, subject to the needs of law enforcement.
3. . . . consumers are entitled to connect their choice of legal devices that do not harm the network.
4. . . . consumers are entitled to competition among network providers, application and service providers, and content providers. (Federal Communications Commission, 2005b, p. 3)

The FCC's fourth principle goes a bit beyond Powell's idea of fully informing consumers about their broadband plans. The next two sentences in the statement are a bit puzzling, but clearly indicate the difficulty the Commission had in reconciling the conflicting views of its members: "Although the Commission did not adopt rules in this regard, it will incorporate these principles into its ongoing policymaking activities. All of these principles are subject to reasonable network management" (Federal Communications Commission, 2005b, p. 3, footnote 15).

In March 2005, just before Michael Powell left office, the FCC struck a blow for net neutrality by forcing a small DSL service provider, the Madison River Telephone Company based in Mebane, North Carolina, to stop blocking its customers from using Vonage's voice-over-Internet-protocol (VoIP) service. The FCC negotiated a consent decree with the company that is now considered an important legal precedent for net neutrality (Federal Communications Commission, 2005a).

Nevertheless, the Madison River action was taken against a telephone company using existing laws that gave the FCC regulatory powers over telephone companies, whereas advocates of net neutrality wanted the FCC's powers to be extended to cable operators and other providers of broadband services (McCullagh, 2005).

### **THE WHITACRE INTERVIEW**

The net neutrality debate rose to a higher level of intensity after Edward E. Whitacre, Jr., then

CEO of SBC Telecommunications,<sup>3</sup> was quoted in an October 2005 interview as follows:

**Q: How concerned are you about Internet upstarts like Google, MSN, Vonage, and others?**

A: How do you think they're going to get to customers? Through a broadband pipe. Cable companies have them. We have them. Now what they would like to do is use my pipes free, but I ain't going to let them do that because we have spent this capital and we have to have a return on it. So there's going to have to be some mechanism for these people who use these pipes to pay for the portion they're using. Why should they be allowed to use my pipes? The Internet can't be free in that sense, because we and the cable companies have made an investment and for a Google or Yahoo! or Vonage or anybody to expect to use these pipes [for] free is nuts! (McConnell, 2005)

Suddenly what had been theoretical speculation about the potential for discrimination by infrastructure owners against service providers no longer seemed theoretical.

### **VINT CERF WEIGHS IN**

One of the founding fathers of the Internet, Vint Cerf, sent a letter to Representatives Joe Barton (R-Texas) and John Dingell (D-Michigan) on November 8, 2005, defending the idea of net neutrality:

The remarkable social impact and economic success of the Internet is in many ways directly attributable to the architectural characteristics that were part of its design. The Internet was designed with no gatekeepers over new content or services. The Internet is based on a layered, end-to-end model that allows people at each level of the network to innovate free of any central control . . . Enshrining a rule that broadly permits network operators to discriminate in favor of certain kinds of services and to potentially interfere with

others would place broadband operators in control of online activity. Allowing broadband providers to segment their IP offerings and reserve huge amounts of bandwidth for their own services will not give consumers the broadband Internet our country and economy need. Many people will have little or no choice among broadband operators for the foreseeable future, implying that such operators will have the power to exercise a great deal of control over any applications placed on the network. (Cerf, 2005)

At the time, Cerf was employed as “Chief Internet Evangelist” for Google. Nevertheless, he was there at the creation of the Internet and for many years chaired the Internet Activities Board. The arguments he mustered in his letter were to appear again and again in subsequent statements by Net neutrality advocates, so it might be helpful to review them in some detail.

### *End-to-End Architecture*

One of the most important ideas behind the Internet is packet switching. Packet switching permits messages to be sent from origin to destination via whatever paths are available on the network. The original message is divided into packets to take advantage of the possibility of sending parts of the message via different routes, thus using the network efficiently and allowing it to deliver a message even though a specific path may not be functioning. Packet switching requires that each node in the network have a unique identifier that is accessible to all the other nodes via dedicated computers, called root servers (Mueller, 2002; Saltzer, Reed, & Clark, 1984).

In theory, the network sends packets from node to node independent of content. The packets are then reassembled in the correct order at the destination. In practice, however, not all packets are treated equally. It is possible to prioritize messages that are particularly time-dependent—such as audio files for voice telephony applications—so that the end user does not experience delays in reception and other

forms of signal degradation. The telephone companies have argued strongly for preserving their right to prioritize the delivery of certain types of content (mainly telephony-related audio and real-time video) in order to assure what they call “quality of service” (Quality of Service, n.d.).

More recently, technological changes have permitted telephone and cable companies to manage the traffic on their networks by deep packet inspection (DPI). Whereas prioritization of voice telephony simply requires looking at the header of a file to determine what type of file it is, DPI allows the network operator to examine the contents of incoming packets (not just the header) in fuller detail while deciding how to handle them. According to the telephone and cable companies, DPI is necessary for guaranteeing quality of service.

For a packet-switched network to operate efficiently, it needs to have as much flexibility as possible in determining along which paths to convey packets. If the network discriminates against certain nodes, paths associated with those nodes might not be available when they are needed. A user at a node that is being discriminated against will experience slower than average speeds of transmission and reception and may not be able to communicate with other nodes at all. Thus one of the basic notions behind the value of communications networks (that all nodes can reach all other nodes) is put in jeopardy. Similarly a network that prioritizes certain types of packets (especially packets of content that directly benefits the network providers) is clearly discriminating against other service providers.

The end-to-end argument, to summarize, was that it is better not to prioritize packets but instead to upgrade the entire network to deal with quality assurance issues while maintaining the overall openness of the Internet. Opponents call this the “dumb network” approach, as opposed to the “intelligent network” or “quality of service” approach that they favor. David Isenberg summarized the argument as follows:

A new network “philosophy and architecture” is replacing the vision of an Intelligent Network. The vision is one in

which the public communications network would be engineered for “always-on” use, not intermittence and scarcity. It would be engineered for intelligence at the end-user’s device, and not in the network. And the network would be engineered simply to “Deliver the Bits, Stupid,” not for fancy network routing. (Isenberg, 1997)

The question of dumb vs. intelligent networks would prove to be important in the debates over net neutrality.

### ***Discrimination by Broadband Service Providers against Other Service Providers***

Discrimination by broadband service providers—such as AT&T, Verizon, Time Warner, or Comcast—would be a problem both for other service providers—such as Google and Yahoo!—and their users. The most egregious form of discrimination by broadband service providers would be complete denial of connection to the infrastructure, but a more subtle form of discrimination could occur if connectivity charges were too high for the content or application services providers to be able to compete with services offered by the broadband service providers.

Economists have recently modeled this in their theories of “two-sided markets.” In a two-sided market, an intermediary exists between producers and consumers that decides which producers will have access over a network to which consumers under what terms. Many network infrastructures have this characteristic. For example, railroad transportation has shippers and final customers who are connected to one another via a railroad operator. In a telephone network, sellers and buyers use the network without having to identify what type of user they are to the operator. The telephone network, therefore, is a one-sided market. In other networks, this is not the case and a clear distinction can be made between senders and receivers. When this occurs, the network constitutes a two-sided market in which the network operator can price access to the network differentially according to the type of user (Parker & Van Alstyne, 2000).

So, in essence, what the proponents of net neutrality want is that the Internet be a one-sided market and what the opponents want is that it be two-sided.

### ***Reservation of Bandwidth by Broadband Service Providers***

It has been suggested that the telephone companies intended to reserve up to 80 percent of the total bandwidth in their networks for services that they intended to offer (mostly cable-TV-like video services), leaving only 20 percent available for other services. The telephone companies claimed that this would be necessary to provide broadcast-quality video services to customers so that they could compete on equal terms with cable operators. They said that they needed to do this in order to invest in future infrastructural improvements. But the fear of other service providers was that, unless they paid substantially larger connectivity fees, they would be relegated to the “slow lanes” of the broadband Internet, especially as overall traffic increased. The desire of telephone companies to compete directly with cable operators, in their view, meant that telephone companies would come to possess the same power to decide who got to offer what services to customers over the networks as cable operators. Instead of an open network, there would be a “walled garden” (Messaging Anti-Abuse Working Group, 2007).

### ***Exercise of Market Power by Broadband Service Providers***

Since the over 87 percent of all U.S. households that can potentially subscribe to broadband services can get them only from telephone or cable companies, and about one-third of these households have access either to DSL or cable modem services, but not both, there is a concern that broadband service providers might use their monopoly or duopoly market power to extract rents (excessive profits) from customers and to exclude certain service providers or consumers for non-economic reasons. The latter would be particularly problematic from a freedom-of-speech or censorship perspective.



### ***TIM BERNERS-LEE WEIGHS IN***

In late March 2006, Tim Berners-Lee, a chief architect of the World Wide Web and the inventor of the hypertext markup language (HTML), stated his support for the net neutrality movement in an interview with the *Toronto Star*:

It stops being the Net if a supplier of downloaded video pays to connect to a particular set of consumers who are connected to a particular cable company. It would no longer be an open information space. . . . The whole point of the Web is when you arrive it's more or less the same for everybody. That integrity is really essential. . . . I'm very concerned. (Hamilton, 2006)

Berners-Lee continued to speak out in favor of net neutrality guarantees, as did Vint Cerf. It was somewhat surprising to supporters, therefore, when David Farber and Robert Kahn, also Internet pioneers, came out against net neutrality (see section on Opposing Views below).

### ***THE CHRISTIAN COALITION WEIGHS IN***

On May 17, 2006, Roberta Combs, President of the Christian Coalition of America, announced her organization's support for net neutrality:

Under the new rules, there is nothing to stop the cable and phone companies from not allowing consumers to have access to speech that they don't support. What if a cable company with a pro-choice Board of Directors decides that it doesn't like a pro-life organization using its high-speed network to encourage pro-life activities? Under the new rules, they could slow down the pro-life web site, harming their ability to communicate with other pro-lifers—and it would be legal. We urge Congress to move aggressively to save the Internet—and allow ideas rather than money to control what Americans can access on the World Wide Web. We urge all

Americans to contact their Congressmen and Senators and tell them to save the Internet and to support "Net Neutrality." (Christian Coalition of America, 2006)

Freedom of speech was also a major concern of the American Civil Liberties Union, the American Library Association, the Gun Owners of America (Fields, 2008), and MoveOn.org.

### ***OPPOSING VIEWS***

One particularly strong statement in opposition to net neutrality came out in February 2006 from the U.S. Internet Industry Association (USIAA). In the first sentence, a phrase destined to be repeated many times by opponents of net neutrality appeared: "Net neutrality is a solution in search of a problem." The document went on to argue that the concept itself was vague and its definition was shifting constantly, that legislation banning tiered or selective service plans would "eliminate Christian-focused Internet services" and "would have the practical effect of forcing families to accept pornography into their homes . . ." (U.S. Internet Industry Association, 2006).

J. Gregory Sidak, a visiting professor of law at Georgetown University, testified in opposition to net neutrality at a Senate Committee on Commerce, Science, and Transportation hearing on February 7, 2006:

"Net neutrality" obligations would require a telecommunications carrier to operate its broadband network so that no packet of information is treated as inferior to others in terms of its urgency of delivery. Under "net neutrality" I can take comfort in knowing that my son's Internet chatting about what agent Jack Bauer did on last night's episode of *24* will receive the same priority of delivery as my file transfer of this testimony to the Committee's staff. The practical effect of "net neutrality" obligations would be to require a telecommunications carrier to recover the full cost of its broadband network connection through a uniform flat-rate charge imposed on all end users.

Companies like Google, eBay, and Yahoo! might believe that such an outcome works to their private economic advantage, but that short-run view would neglect the disincentive that “net neutrality” obligations would create for private investment in the very broadband infrastructure upon which these companies rely to deliver their content and applications to consumers. (Sidak, 2006)

Robert Kahn, who along with Vint Cerf pioneered the TCP/IP protocols, argued that net neutrality was a regulatory slogan that he opposed. He thought it would foreclose innovations in Internet technology that were very much needed (Network Neutrality, n.d.).

In June 2006, David Farber, a professor of telecommunications engineering who was a major participant in the building of the Internet, argued that it would be against the interests of customers to restrict the ability of broadband service providers to manage their networks:

The current Internet supports many popular and valuable services. But experts agree that an updated Internet could offer a wide range of new and improved services, including better security against viruses, worms, denial-of-service attacks, and zombie computers; services that require high levels of reliability, such as medical monitoring; and services that cannot tolerate network delays, such as voice and streaming video. To provide these new services, both the architecture of the Internet and the business models through which Internet services are delivered may have to change.

Congress is considering several initiatives (known collectively under the banner of “network neutrality”) aimed at promoting continuing Internet innovation by restricting network owners’ ability to give traffic priority based on the content or application being carried or on the sender’s willingness to pay. The problem is that some of the practices that network neutrality would prohibit could increase the value

of the Internet for customers. (Farber, 2006)

Following the release of Farber’s statement, the Center for American Progress staged a debate between Farber and Cerf on July 17, 2006, in which Cerf reiterated his major arguments (see above) and Farber backed away a bit from his criticisms of net neutrality guarantees, but continued to defend the idea that Congress was not capable of making good policy decisions in this area: “The Congress seems to be very confused. . . . They don’t understand what the network does. . . . They always pile stuff on, usually at the last minute, that can do harm” (The Great Debate, 2006).

Like Farber, Michelangelo Volpi, Senior Vice President of Cisco Systems, argued against net neutrality on the basis of the need for broadband providers to manage their networks intelligently and without Congressional interference:

The net neutrality debate comes down to this: content providers and aggregators want to regulate the Internet so that service providers cannot charge for different levels of service among their customers. The proposed rules would be akin to regulating that there cannot be carpool lanes on a highway. Broadband service providers who build the networks believe they should be able to manage the networks for efficiency, security, and quality of service. Broadband providers believe they should be able to place intelligence in the core of their network as well as the edge, or the part that reaches consumers. The debate between these two camps centers on whether Congress should step in to create such regulation. It should not. (Volpi, 2006)

Volpi went on to argue that the next generation of Internet users would be increasingly accessing “high-bandwidth, time-sensitive services.” In order to provide a high quality online viewing experience for TV viewers, in particular, it would be necessary to charge higher fees to those users. If higher fees could not be

charged, in Volpi's view, it would be impossible for the market to provide signals about what users really want. Thus, "a market-based approach is the correct way to go with the Internet" (Volpi, 2006).

Robert Pepper, former FCC chief of policy development, who became the senior managing director of global advanced technology policy at Cisco Systems in July 2005, said:

... supporters of net neutrality regulation believe that more rules are necessary. In their view, without greater regulation, service providers might parcel out bandwidth or services, creating a bifurcated world in which the wealthy enjoy first-class Internet access, while everyone else is left with slow connections and degraded content. That scenario, however is a false paradigm. Such an all-or-nothing world doesn't exist today, nor will it exist in the future. Without additional regulation, service providers are likely to continue doing what they are doing. They will continue to offer a variety of broadband service plans

at a variety of price points to suit every type of consumer. (The Great Debate, 2006)

### **HOW THE INTERESTS LINED UP**

Table 2 provides of summary of how different individuals and groups lined up for and against net neutrality. It does not include individuals and groups who took an in-between or third position. From a partisan political standpoint, there were clearly more Democrats than Republicans in favor of net neutrality. Business interests split, with application and content providers for and broadband service providers and telecommunications equipment manufacturers against. Some conservative interest groups were supporters of net neutrality—such as the Christian Coalition and the Gun Owners of America—but most opposing groups were conservative. Conservative think tanks and academics mostly opposed net neutrality.

It is worth noting that the cable companies and their trade association, the National Cable and Telecommunications Association (NCTA),

TABLE 2. Who Favored and Who Opposed Net Neutrality?

In favor of net neutrality	Opposed to net neutrality
Large, Internet-based companies: Amazon.com eBay Google Microsoft	Large, broadband service providers: AT&T BellSouth Comcast Verizon
Consumer/civil liberties groups: American Civil Liberties Union Consumers Union Free Press Public Knowledge	Network equipment providers: Alcatel Cisco Corning Qualcomm 3M
Interest groups: American Library Association Christian Coalition of America Computer Professionals for Social Responsibility Gun Owners of America MoveOn.org TechNet Service Employees Intl. Union SavetheInternet.com Coalition	Interest groups: American Conservative Union Citizens Against Government Waste Communications Workers of America National Association of Manufacturers National Black Chamber of Commerce National Coalition on Black Civic Participation Hands Off the Internet US Internet Industry Association

Source: Tooley (2006), with modifications by the author.

were not particularly eager to support the video franchise bill because a national video franchise would make it easier for telephone companies to compete with them. According to NCTA spokesperson Rob Stoddard, “Our approach so far has been one of pragmatism and acknowledging that there is strong sentiment for a national video franchise. . . . We haven’t fully weighed in. It’s a matter of seeing what the various committees do with it before it reaches the floor” (Sullivan, 2006).

There were a number of individuals and groups who adopted an intermediate position, not agreeing entirely with either the pro- or anti- forces. As a consequence of the vigorous debate over net neutrality, Congress began to consider embedding net neutrality guarantees in legislation.

### ***THE INTERNET NON-DISCRIMINATION ACT***

The Internet Non-Discrimination Act of 2006 (S. 2360) was introduced by Senator Ron Wyden (D-Oregon) on March 2, 2006 in the Senate Committee on Commerce, Science, and Transportation. It never got out of committee.

### ***THE INTERNET FREEDOM AND NONDISCRIMINATION ACT OF 2006***

The Internet Freedom and Nondiscrimination Act of 2006 (H.R. 5417) would have made it a violation of the Clayton Antitrust Act for broadband providers to “fail to provide access to its broadband network on reasonable and nondiscriminatory terms and conditions to anyone to offer content, applications or services at least equal to the broadband provider’s own services (or its affiliate’s services) . . .” (Windhausen, 2006). Introduced by Representatives F. James Sensenbrenner (R-Wisconsin) and John Conyers (D-Michigan) on May 18, 2006, it was approved by the House Judiciary committee on May 25, 2006, in a 20–13 vote (the 14 Democrats were joined by six Republicans; the remaining 13 Republicans voted no). The bill was never taken up on the House floor and thus failed to be enacted.

The Judiciary Committee’s vote was affected somewhat by a turf battle between with the House Energy and Commerce Committee. While the former was considering the Internet Freedom and Nondiscrimination Act, the latter was considering the video franchise bill (see the following section below). The Judiciary Committee wanted to make sure that antitrust matters remained under the jurisdiction of the Department of Justice. The video franchise bill would have given a sort of specialized antitrust enforcement authority to the Federal Communications Commission (McCullagh & Broach, 2006).

### ***THE VIDEO FRANCHISE BILL***

The main purpose of the video franchise bill was to make it possible for telephone companies to offer cable-TV-like video services over the telephone infrastructure in competition with the cable operators. The telephone companies had argued that it would be impossible for them to compete effectively if they had to devote the time and energy already spent by cable companies winning the approval of state and local governments for video franchises, so the bill aimed to create national franchises instead of local ones for this purpose.

Representatives Joe Barton (R-Texas), Chairman of the House Energy and Commerce Committee, and Fred Upton (R-Michigan) sponsored and introduced the House’s version of the bill, the Communication Opportunity, Promotion, and Enhancement (COPE) Act of 2006 (H.R. 5252), on March 30, 2006. Senator Ted Stevens (R-Alaska), Chairman of the Senate Commerce Committee, sponsored and introduced the Senate’s version of the bill, the Communications, Consumer’s Choice, and Broadband Deployment Act (CCBD) of 2006 (S.2686), on May 1, 2006.

Both versions of the bill contained language corresponding closely to the FCC’s four principles. The House version contained authority for the FCC to punish violators of broad Internet nondiscrimination principles with \$500,000 fines, but the authority was only to adjudicate complaints on a case-by-case basis

and not to establish regulations mandating net neutrality.

Representative Ed Markey (D-Massachusetts) offered amendments to the House bill both in committee in April and during the floor debate on June 8, 2006, that included explicit net neutrality guarantees, but these amendments were defeated. The House version of the bill passed by a vote of 321–101 on June 8, 2006, and the Markey Amendment was defeated on the floor of the House by a vote of 152–269 (58 Democrats voted with 211 Republicans against the amendment; only 11 Republicans voted in favor).

One of the Democrats who voted for the bill was Eliot Engel (D-New York). Engel, who represented a New York City constituency, said that in his district “competition in video service does just not exist. . . . I have heard opposition to this bill, and I respect it. But on balance I have to support this bill” (Clark, 2006b). Another Democrat, Bobby Rush (D-Illinois), said that his constituents in the Chicago area, many of them African-American, would benefit from the lower prices for cable services that the bill would provide (Eggerton, 2006).

When the Senate’s version of the bill was being considered in committee, Senator Olympia Snowe (R-Maine) proposed a net neutrality amendment entitled the Internet Freedom Preservation Act of 2006 (S. 2917) that was defeated in an 11–11 vote on June 28, 2006. All 10 Democrats on the Committee voted with Senator Snowe. The video franchise bill passed in committee by a vote of 15–7. Senator Snowe was the only Republican who voted against it. Senator Ron Wyden (D-Oregon) said he would try to block it on the Senate floor (Clark, 2006b).

Senator Stevens made his famous statement about the Internet in a speech on June 28, 2006, while explaining his vote against the net neutrality amendment:

And again, the Internet is not something you just dump something on. It’s not a big truck. It’s a *series of tubes*. And if you don’t understand those tubes can be filled and if they are filled, when you put your message in, it gets in line and it’s

going to be delayed by anyone that puts into that tube enormous amounts of material, enormous amounts of material. (Series of Tubes, n.d.)

Even though Stevens was simply trying to make a point, albeit ineptly, about bandwidth hogs, his statement was immediately picked up by net neutrality supporters as evidence of Stevens’ lack of knowledge about the Internet. Lampoons of the statement promptly appeared on Google Video and YouTube, Jon Stewart made fun of it on *The Daily Show*, and bloggers went wild (see Figure 1).

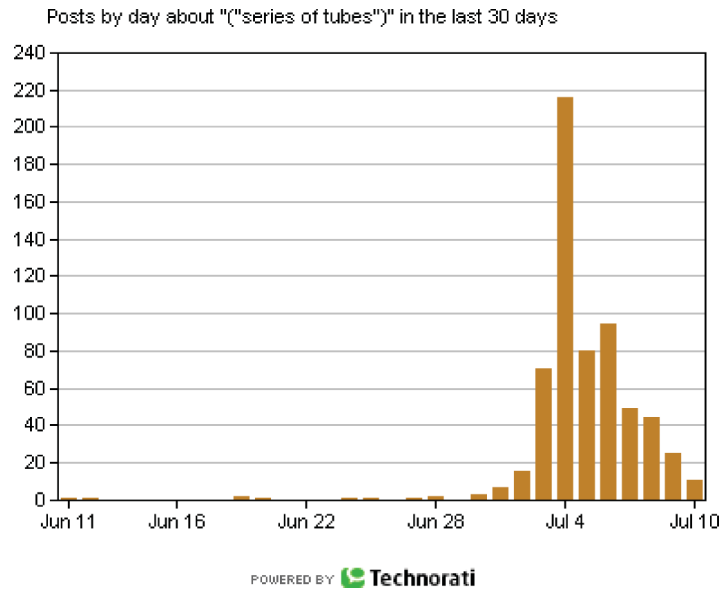
Stevens’ constituents in Alaska were not too happy with his position on net neutrality. The Anchorage *Daily News* published an editorial in favor of net neutrality on September 5, 2006 (Anchorage Daily News, 2006). MoveOn.org targeted Stevens and other opponents of net neutrality for ads criticizing their views and publicizing the campaign contributions they had received from telecommunications interests.

Senator Wyden issued a statement on June 26, 2006, announcing his intention to place a “hold” on a vote on the video franchise bill because it lacked net neutrality guarantees:

As a United States Senator who has devoted himself to keeping the Internet free from discrimination, from discriminatory taxes and regulations to assuring offline protections apply to online consumer activities as well, I cannot stand by and allow the bill to proceed with this provision. The inclusion of this provision compels me to inform my colleagues that I would object to any unanimous consent request for the United States Senate to move to consider this bill. (Wyden, 2006)

The video franchise bill was not put up for a vote in the Senate as a result of Wyden’s hold and the implied threat of a filibuster. To break the hold, Senator Stevens needed 60 votes. He did not have them.

FIGURE 1. Posts by day about “series of tubes” in the 30 days following the statement by Senator Stevens (color figure available online).



### LOBBYING EFFORTS

Lobbying played a role in the defeat of the various efforts to amend the video franchise bill to include explicit net neutrality guarantees. Large sums were spent, in particular, by the telecommunications industry. Estimates of the total spent by cable, telephone, and Internet companies in the first half of 2006 were in the neighborhood of \$110 million (see Table 3). Perhaps this was the basis of published claims that firms were spending \$1 million per day.

Hands Off the Internet (HandsOff.org) and NetCompetition.org were Web sites funded primarily by the telephone companies that raised a total of \$9.1 million by July

2006. Most of these funds were spent on advertising. ItsOurNet.org—with funding from Microsoft, Google, Yahoo!, and IAC/Interactive Corporation—SavetheInternet.com, run by Free Press, a non-profit group, and MoveOn.org accounted for most of the pro-net-neutrality advertising and lobbying on the Web. They collected a total of \$2.7 million by July 2006 and focused primarily on mobilizing activists in support of net neutrality legislation (Network Neutrality Legislation, n.d.). Over a million people signed an online petition to Congress, which SavetheInternet.com posted on its Web site (Aron, 2006).

In addition, telephone companies provided campaign contributions to certain Senators and

TABLE 3. Money Spent by Telephone, Cable, and Internet Interests on Telecommunications Reform, First Half of 2006, in Millions of Dollars

Category	Specific firms and organization	Amount in \$ millions
Telephone Interests	AT&T, Verizon, BellSouth, and USTA	30.3
Cable Interests	Comcast, Time Warner, Cox, and NCTA	12.2
Internet Interests	Google, Yahoo!, eBay, Microsoft, Amazon.com	8.8
Total		51.3

Source: Hearn (2006).

TABLE 4. Campaign Contributions from Telephone Utilities to Representatives, as of May 9, 2006, in Thousands of Dollars

Representative	Contributions since 1989	Contributions since 2005
Joe Barton (R-TX)	257	30
Charles Pickering (R-MS)	361	44
Bobby Rush (D-IL)	103	8
Fred Upton (R-MI)	142	26

Source: Network Neutrality Legislation, n.d.

Congressmen who they considered to be supporters (see Table 4). The Representatives in Table 4 were all co-sponsors of the House version of the video franchise bill.

In addition to the campaign contributions, there was a scandal over a \$1 million contribution in 2005 from the SBC Charitable Foundation to an Englewood, Illinois, community center founded by Representative Bobby Rush (D-Illinois) (Sweet, 2006). Campaign contributions from the executives of the telephone and telecommunications equipment companies tended to go mainly to Republicans, reflecting the latter's generally more positive stance toward a national video franchise and their opposition to net neutrality.

### ***PARTISANSHIP AND THE ROLE OF FRAMING***

The debate over net neutrality became largely a partisan debate, despite the fact that a few Republicans like James Sensenbrenner (R-Wisconsin) and Olympia Snowe (R-Maine) favored net neutrality guarantees. The Republican Party had a pre-existing frame for other national issues that fit very well with opposition to net neutrality: government regulation is bad, markets are good. The problem was how to convince the public that net neutrality guarantees constituted bad government regulation. Proponents clearly wanted to give the FCC the power to enforce net neutrality principles. But to make the argument as strongly as possible, opponents of net neutrality had to paint the pre-existing regime for the Internet as non-regulatory (and therefore successful) and to find examples of poor regulatory decisions

by the FCC. They used the example of the Telecommunications Act of 1996 to make the point that bad regulation had bad results (slow deployment of DSL by telephone companies). They turned frequently to the example of cable TV deregulation in the Reagan administration in 1988 to show that deregulation had good results.

The relatively complicated concept of net neutrality originally put forward by proponents posed problems for supporters and opportunities for opponents. It was easy for opponents to criticize the idea as vague and shifting. Very few people understood what net neutrality meant. A public opinion survey conducted by the Glover Park Group and Public Opinion Strategies in September 2006 revealed that only 5 percent of respondents said that they had heard or seen anything about net neutrality. However, when the pollsters explained the concept, many responded favorably (Fisher, 2006).

The main problem for proponents of net neutrality was to find a way to explain the issue to a broader public. They had to do this in order to go beyond their core supporters: telecommunications experts and lawyers, civil rights organizations, and Internet-related businesses. Prior to June 2006, proponents responded defensively to the arguments of opponents. Table 5 summarizes the arguments of opponents and the counter-arguments of proponents.

Proponents did not help their cause when they defined net neutrality in technological terms instead of in terms of issues like freedom of speech, economic development, job creation, and consumer choice, which politicians and voters could understand. This began to change immediately after the defeat of net neutrality amendments in June 2006.

TABLE 5. Arguments and Counter-Arguments Regarding Net Neutrality

Subissues	Opponents	Proponents
Role of the market	Let the market do its magic	Enforce antitrust laws so the market can do its magic
Threat of discrimination	Net neutrality guarantees are unnecessary because there has been no discrimination by telephone and cable companies	Cite statement by Edward Whitacre and the Madison River case
Desirability of regulation	Undesirable (cite positive example of cable deregulation and negative example of Telecom Act of 1996)	Desirable (argue that net neutrality guarantees were in place until FCC removed them)
Need to prioritize packets	Necessary for intelligently managing future broadband networks	Not necessary or desirable because it undermines end-to-end architecture
Need to create incentives for telephone and cable companies to build future networks	Future networks cannot be paid for unless providers can charge content and application providers for prioritizing packets	Telephone and cable companies will discriminate against competitors and overcharge consumers
Need to create more competition	Best way to do this is to have telephone and cable companies compete	Best way to do this is to add wireless, municipal, and public broadband providers

### ***THE TIDE BEGINS TO TURN***

In a podcast published on the Internet on June 8, 2006, Democratic candidate for the presidency Barack Obama stated his support for net neutrality:

The topic today is net neutrality. The Internet today is an open platform where the demand for Web sites and services dictates success. You've got barriers to entry that are low and equal for all comers. . . . I can say what I want without censorship. I don't have to pay any special charge.

But the big telephone and cable companies want to change the Internet and strike exclusive contractual arrangements with Internet content-providers for access to those high-speed lanes. Those of us who can't pony up the cash for these high-speed connections will be relegated to the slow lanes. So here's my view. We can't have a situation in which the corporate duopoly dictates the future of the Internet, and that's why I'm supporting what is called net neutrality. (Marsden, 2010, p. 1)

The mid-term elections in November 2006 resulted in new majorities for the

Democrats in both the House and the Senate. Democrats replaced Republicans as chairs of the committees in charge of telecommunications. Representative John Dingell (D-Michigan) replaced Joe Barton (R-Texas) as Chairman of the House Committee on Energy and Commerce, and Edward Markey (D-Massachusetts) became Chairman of the Subcommittee on Telecommunications and the Internet. Daniel Inouye (D-Hawaii) replaced Ted Stevens (R-Alaska) as Chairman of the Senate Committee on Commerce, Science, and Transportation. While the FCC remained under Republican control, and Kevin Martin—a strong opponent of net neutrality—became chairman after the departure of Michael Powell, the new Republican member of the Commission, Robert M. McDowell, soon began to disagree with Martin over a variety of issues (just as Martin had done earlier with Powell).

### ***The AT&T-BellSouth Merger***

In order to gain regulatory approval for its merger with BellSouth, AT&T agreed on December 29, 2006, to

. . . maintain a neutral network and neutral routing on its wire line broadband



Internet access service. This commitment shall be satisfied by AT&T/BellSouth's agreement not to provide or to sell to Internet content, application, or services providers, including those affiliated with AT&T/BellSouth, any service that privileges, degrades or prioritizes any packet transmitted over AT&T/BellSouth's wire line Internet access service based on its source, ownership, or destination. (Quinn, 2006)

While this commitment was only for a two-year period, supporters of net neutrality viewed AT&T/BellSouth's move as an important precedent and a vindication of their efforts. If they had not been able to demonstrate that there was substantial political support for net neutrality, no such concession would have been forthcoming.

The AT&T agreement to the consent decree was a blow to FCC Chairman Martin, who had opposed it up to the last minute. Martin apparently cared more about preventing net neutrality than AT&T. Of course, there was a lot of money involved in the merger (\$87 billion to be precise), and from CEO Edward Whitacre's point of view, business came first (Brodsky, 2007). After the AT&T agreement, Chairman Martin was more inclined than previously to support a limited form of net neutrality.

In January 2007, Senators Snowe and Byron Dorgan (D-North Dakota) introduced yet another net neutrality bill in the Senate, the Internet Freedom Preservation Act (S.215). Besides mandating nondiscrimination, the bill would require broadband operators to offer "naked" DSL and cable modem service that did not require the purchase of other services. It was referred to the Senate Committee on Commerce, Science, and Transportation, but was never reported out of committee.

In 2007, the question of the relatively backward position of the United States in the global race to deploy broadband networks began to appear in Democratic criticisms of the Bush administration and the FCC. The Congress began to consider ways to address this, most notably in the form of proposed legislation to create a broadband inventory map of the nation. Senator Inouye sponsored a bill to do this called

the Broadband Data Improvement Act of 2007 (S. 1482), which cleared the Senate Commerce Committee by a unanimous vote in July 2007. It passed in the Senate on September 26, 2008 (it was now the Broadband Data Improvement Act of 2008, S. 1492) by unanimous consent, and in the House without objection three days later. President Bush signed the bill on October 10, 2008.

At the Democratic National Convention in the summer of 2008, net neutrality was embedded in the official party platform (Democratic National Convention Committee, 2008). The Democrats had been quite successful in publicizing the issue to garner campaign contributions and thought that it would help them to win the presidency in 2008. And in fact, Google was the number three provider of campaign funds (behind Goldman Sachs and Microsoft) for the Obama Campaign at \$800,000 (Carney, 2010).

### ***COMCAST THROTTLES BITTORRENT DATA STREAMS***

In August 2007, Comcast began to block file transfers on its network by customers using popular peer-to-peer (P2P) networks such as BitTorrent, eDonkey, and Gnutella. This was done without any public announcement, but after it was first detected by an engineer in Oregon, Robb Topolski, when he was trying to download some barber shop quartet music from a BitTorrent site. Topolski publicized the results of his efforts to understand what had happened in an online blog called TorrentFreak (Ernesto, 2007). The Electronic Frontier Foundation and the Associated Press conducted their own tests and confirmed that Comcast was indeed engaging in the practices Topolski had identified (Svensson, 2007).

Apparently, Comcast had been applying an application called Sandvine that permitted them to throttle certain types of traffic (which they called "traffic shaping") even though the traffic was encrypted. BitTorrents works by sending parts (packets) of a file to a number of cooperating users' computers, which are then used to speed up the transfer to its final destination

in a process called “seeding.” The Sandvine application stops or slows the transfer by recognizing the seeding and then refusing to acknowledge the transmissions (Topolski, 2007).

Although Comcast claimed that this was a legitimate way to reduce congestion on its network and to prevent copyright infringement, many users complained to the FCC that Comcast was violating net neutrality by doing so. The FCC agreed with the critics in an August 2008 ruling, and told Comcast to stop using Sandvine and to fully inform consumers and the FCC about how it was planning to manage network traffic in the future (Federal Communications Commission, 2008). Comcast was given 30 days to comply. Although it did so, it appealed the decision to the U.S. Court of Appeals of the District of Columbia Circuit. The Court of Appeals would issue its final decision in April 2010 (more on this later).

The essence of Comcast’s argument was that the FCC had given up its right to regulate broadband Internet service providers (ISPs) in 2002 when it classified cable modem services as “information services” and therefore not subject to the “common carriage” rules that applied to telephone and dial-up Internet services. The Telecommunications Act of 1996 defined two categories of services: (1) *telecommunications services*, which are subject to mandatory regulation as common carriers under Title II of the Act; and (2) *information services*, which are considered private carriers not subject to common carrier regulation. Whereas common carriers are required to serve all customers on equal terms (they cannot discriminate or deny services to anybody), private carriers can decide which customers to serve and what prices to charge them. These two categories of services, originally called “basic” and “enhanced” services in the FCC’s Computer II inquiry in the 1970s, were incorporated into the language of the 1996 Telecommunications Act (Cherry, 2008; Noam, 1994).

After 2001, the Bush administration and its allies argued that the best way to get private companies to compete with one another in building new, enhanced telecommunications networks was to even the playing field between cable and telephone companies. After

the broadband services of cable companies were exempted from regulation as common carriers in 2002, the telephone companies lobbied hard and successfully for the same exemption for DSL services. In June 2005, the Supreme Court ruled that cable companies did not have to open their broadband networks to competitors in what came to be called the “Brand X” decision (U.S. Supreme Court, 2005). On August 5, 2005, the FCC voted 4–0 to reclassify DSL from a telephone service (subject to common carriage regulation under Title II) to an information service (FCC Reclassifies . . . , 2005).

### THE OBAMA ADMINISTRATION

After January 20, 2009, the Obama Administration wanted to deliver on the promises that had been made during the election campaign concerning net neutrality. While its first concern was dealing with the combined financial crisis and recession, it began almost immediately to address issues connected with broadband networks and services. The American Recovery and Reinvestment Act of 2009, which was part of the larger efforts to stabilize the economy, included an allocation of \$7.2 billion for investment in broadband infrastructure. It also mandated that the FCC prepare a National Broadband Plan by February 17, 2010.

On January 12, 2009, it was announced that Julius Genachowski would be President-Elect Obama’s first choice for chairman of the FCC. Genachowski had been the head of the Technology, Media, and Telecommunications policy working group during the campaign and part of the transition team after November. He was Obama’s classmate at Harvard Law School and a legal adviser to Reed Hundt, chairman of the FCC during the Clinton administration. He assumed office on June 29, 2009.

Genachowski announced a new set of principles for Internet service providers, building upon the earlier efforts of Michael Powell. The reader will recall that Powell proposed four “freedoms” to protect consumers in 2004 that were revised and incorporated into the FCC’s Policy Statement in 2005:

- Freedom to access content
- Freedom to use applications
- Freedom to attach personal devices
- Freedom to obtain service plan information

To these, Genachowski added two additional principles in a speech delivered on September 21, 2009:

- “Broadband providers cannot discriminate against particular Internet content or applications.”
- “Providers of broadband Internet access must be transparent about their network management processes.” (Genachowski, 2009)

Vint Cerf of Google approved strongly of the proposed rules. He said Google “could not be more pleased to see Chairman Genachowski take up this mantle, and we look forward to working with the commission as it finalizes its plans” (Reed, 2009). He stated his support for the idea that “the Internet [remain] a platform for innovation, economic growth, and free expression.” Larry Lessig, Gigi Sohn of Public Knowledge, and representatives of Amazon, the Consumers Union, and the Consumer Federation of America were also pleased with the speech (Schatz, 2009). The two other Democratic members of the FCC, Mignon Clyburn and Michael Copps, both expressed their support. Congressional Democrats also supported Genachowski’s ideas. Speaker of the House Nancy Pelosi (D-California) and Senate Commerce Committee Chairman Jay Rockefeller (D-West Virginia) praised the speech (Eggerton, 2009).

Genachowski’s speech resulted in immediate pushback from telephone and cable companies and their allies. The telephone industry’s main lobbying group, USTelecom, said that “the bar needs to be set very high when it comes to additional government intervention.” The National Cable and Telecommunications Association said “any regulation in this arena should be approached with great caution and only in the most targeted way, and to advocate policies that avoid government entanglement in

operational decisions that could undermine the very dynamism of the Internet we all seek to preserve.” AT&T argued that the FCC may be headed toward regulating wireless services in “the absence of any compelling evidence of problems or abuse that would warrant government intervention” (Eggerton, 2009).

In the Congress, Senator Kay Bailey Hutchison (R-Texas) led the Republican counterattack. In late September, 2009, she issued the following statement:

I am deeply concerned by the direction [in which] the FCC appears to be heading. Even during a severe downturn, America has experienced robust investment and innovation in network performance and online content and applications. For that innovation to continue, we must tread lightly when it comes to new regulations. Where there have been a handful of questionable actions in the past on the part of a few companies, the commission and the marketplace have responded swiftly. (Eggerton 2009)

Other Republicans also expressed their objections. Senators John Ensign (R-Nevada), Sam Brownback (R-Kansas), David Vitter (R-Louisiana), Jim DeMint (R-South Carolina), and John Thune (R-South Carolina) all supported Senator Hutchison’s views. Chairman Genachowski attempted to reach out to the Republican legislators to address their concerns, but the partisan divide on net neutrality was as wide as it had been during the Bush administration.

As a way of trying to build support for the new rules, Genachowski authorized the creation of a new Web site, OpenInternet.gov, for online discussions about the future of the Internet. The site included a blog that tracked the decisions that the FCC was considering in connection with the Internet and broadband services. In an interview on YouTube in February 1, 2010, President Obama stated strong support for Genachowski’s initiative:

I’m a big believer in Net Neutrality. . . . My FCC Chairman Julius Genachowski

has indicated that he shares the view that we've got to keep the Internet open, that we don't want to create a bunch of gateways that prevent somebody who doesn't have a lot of money but has a good idea from being able to start their next YouTube or their next Google on the Internet. (YouTube, 2010)

President Obama and Chairman Genachowski were attempting clearly to reframe the net neutrality issue under a new rubric, an "open Internet," in which the main goal was to foster innovation and to maintain low barriers to market entry for innovative firms.

### ***THE INTERNET FREEDOM PRESERVATION ACT OF 2008 AND 2009***

In February 2008, Edward Markey (D-Mass.) and Charles Pickering (R-Mississippi) made another attempt to legislate net neutrality guarantees by amending the Telecommunications Act in the form of the Internet Freedom Preservation Act of 2008 (H.R. 5353). The bill never made it out of committee. In July 2009, Edward Markey (D-Massachusetts) and Anna Eshoo (D-California) introduced the Internet Freedom Preservation Act of 2009 (H.R. 3458). Again it called for amending the Telecommunications Act to include net neutrality guarantees, but this time it included provisions for "reasonable network management," in an obvious attempt to throw a bone to the telephone and cable companies. Support for the bill was immediately forthcoming from Free Press, Public Knowledge, Save the Internet, and similar groups. Opposition came, as usual, from the telephone and cable companies and their Republican allies.

During the first quarter of 2010, according to the Center for Responsive Politics, opponents of net neutrality spent \$19.7 million lobbying against net neutrality legislation. Proponents spent only \$4.7 million. AT&T spent \$2.6 million, Comcast spent \$2 million, and Verizon spent \$1.2 million. USTelecom and the National Cable and Telecommunications

Association (NCTA) also contributed to the lobbying effort on behalf of the telephone and cable companies. Amazon, Microsoft, and Google were the main firms lobbying in favor of net neutrality (Blumenthal, 2010a). Realizing that they would probably have to do more, Google and Microsoft upped the ante in the summer of 2010 by hiring an additional 112 former government officials to help them in their lobbying efforts (Blumenthal, 2010b).

### ***THE COMCAST RULING AND THE NATIONAL BROADBAND PLAN***

On April 6, 2010, the U.S. Circuit Court of Appeals for the District of Columbia ruled that the FCC did not have to authority to regulate Internet service providers under the Telecommunications Act of 1996, and therefore that Comcast was not subject to FCC rules regarding traffic management methods (see the section above on "Comcast Throttles BitTorrent Data Streams"). The Court accepted the arguments of Comcast's attorneys that the FCC gave up its authority to regulate ISPs when it reclassified first cable modems and then DSL as information services and therefore not subject to Title II of the 1996 Act (United States Court of Appeals for the District of Columbia Circuit, 2010).

The Obama administration was taken aback by this ruling, but Chairman Genachowski decided to use the public unveiling of the National Broadband Plan as an opportunity to reframe and explain the administration's stance toward net neutrality. The American Recovery and Reinvestment Act of 2009 mandated that the FCC prepare and publish a National Broadband Plan by February 2010. The FCC released the Plan in March. It called for transforming the Universal Service Fund, which held roughly \$9 billion in funds, from "supporting legacy telephone service to supporting broadband communications service . . ." (Genachowski, 2010). It also called for the following:

- Protecting consumers and promoting healthy competition by, for example,

- providing greater transparency regarding the speeds, services, and prices consumers receive, and ensuring that consumers—individuals as well as small businesses—are treated honestly and fairly
- Empowering consumers to take control of their personal information so that they can use broadband communications without unknowingly sacrificing their privacy
  - Lowering the costs of investment—for example, through smart policies relating to rights-of-way—in order to accelerate and extend broadband deployment
  - Advancing the critical goals of protecting Americans against cyber-attacks, extending 911 coverage to broadband communications, and otherwise protecting the public's safety
  - Working to preserve the freedom and openness of the Internet through high-level rules of the road to safeguard consumers' rights to connect with whomever they want; speak freely online; access the lawful products and services of their choice; and safeguard the Internet's boundless promise as a platform for innovation and communication to improve our education and health care, and to help deliver a clean energy future (Genachowski, 2010)

In a speech delivered on May 6, 2010, Chairman Genachowski explained the philosophy behind the National Broadband Plan, calling it a “third way” between “heavy-handed prescriptive regulation” and the “light-touch approach” of the past, which in his view had been a failure. He tried to reassure potential opponents that he supported the idea of letting the market be the main determinant of broadband development by ensuring that returns on investment in this area would be attractive to private firms. The government, he argued should focus on “core infrastructure and public safety challenges, providing the basic rules of the road to enable markets to work fairly, acting in a calibrated way when necessary to protect consumers and promote competition, investment, and innovation . . .” (Genachowski, 2010).

In this speech, Chairman Genachowski included his thoughts about how the FCC should

deal with the recent Comcast ruling. He argued that there were two possible responses. The FCC could continue to try to regulate broadband services under the Title I “ancillary authority” provisions of the Telecommunications Act, or it could reclassify broadband services as “communications services,” therefore “restoring the FCC’s direct authority over broadband communications networks but also imposing on providers of broadband access services dozens of new regulatory requirements” (Genachowski, 2010). Because he did not think either of these alternatives was desirable, he proposed a “third way:”

- Recognize the transmission component of broadband access service—and only this component—as a telecommunications service
- Apply only a handful of provisions of Title II (Sections 201, 202, 208, 222, 254, and 255) that, prior to the *Comcast* decision, were widely believed to be within the Commission’s purview for broadband
- Simultaneously renounce—that is, forbear from—application of the many sections of the Communications Act that are unnecessary and inappropriate for broadband access service
- Put in place up-front forbearance and meaningful boundaries to guard against regulatory overreach (Genachowski, 2010)

### **REACTIONS TO THE NATIONAL BROADBAND PLAN**

Telephone and cable companies and their political allies strongly criticized Genachowski for “legal overreach” and threatened a series of legal challenges to the FCC’s efforts to reclassify Internet services as proposed in the National Broadband Plan (Romm, 2010). Representative Joe Barton (R-Texas) argued that none of Genachowski’s proposals was needed. He said, “We’ve got a broadband deployment program right now—it’s called free enterprise. This is a solution that’s looking for a problem that I don’t believe exists” (Gross, 2010). On May

12, 2010, the House Minority Leader, John Boehner (R-Ohio), and the Minority Whip, Eric Cantor (R-Illinois), sent a letter to President Obama voicing their opposition to the National Broadband Plan. They accused Genachowski of trying to do an end-run around Congress in reclassifying Internet services without amending the Telecommunications Act. They argued further that the Plan “threatens to slow job-creating investments and jeopardizing our economic recovery” (Boehner & Cantor, 2010). Tom Tauke, Executive Vice President of Public Affairs for Verizon Communications, said “The regulatory and judicial proceeding that will ensue can only bring confusion and delay the important work of continuing to build the nation’s broadband future” (Kang, 2010). Comcast, Qwest, the CTIA, and the NCTA all expressed disappointment with the Plan and the speech.

On the other side, Gigi Sohn of Public Knowledge, expressed relief that Genachowski had risen to the challenge presented by the Comcast decision:

Look, 10 days ago I came out of the chairman’s office feeling very depressed about where things were going, but things changed. This means supporters will have to drop everything and keep campaigning for this. If this isn’t a seminal moment for the Internet, I don’t know what is. (Kang, 2010)

The Open Internet Coalition, which included Amazon, Google, and eBay in its membership, also favored the proposed changes.

On May 24, 2010, 74 House Democrats sent a letter to Chairman Genachowski urging him not to go ahead with plans to reclassify Internet services (McCullagh, 2010a, 2010b; Rosenbaum, 2010). A key question, therefore, was whether it would be possible to reclassify Internet services without amending the Telecommunications Act to include net neutrality guarantees—that is, to provide a stronger legal basis for the FCC’s new efforts to lightly regulate the Internet—given strong opposition from Republicans and some Democrats, which reflected intense lobbying

efforts on the part of telephone and cable companies.

### ***THE GOOGLE–VERIZON PROPOSAL***

The FCC convened meetings of Internet companies, carriers, and public interest groups during the spring and summer of 2010 in order to find common ground that could form the basis for an overall agreement on broadband services. On August 9, 2010, Google and Verizon unveiled a proposal to the FCC for regulating broadband that represented a possible compromise between net neutrality proponents and opponents. Their intention was to

... craft a balanced policy framework ... guided by two main goals: 1. Users should choose what content application, or devices they use, since openness has been central to the explosive innovation that has made the Internet a transformative medium, and 2. America must continue to encourage both investment and innovation to support the underlying broadband infrastructure . . . (Davidson, 2010)

Under the proposal, the FCC would have the authority strictly to enforce network neutrality rules for wire-line broadband services (both cable modem and DSL) but not wireless (cellular) networks. The purpose of nondiscrimination rules “should be to prevent harm to users or to competition.” Internet applications would not be regulated in this way. Also excluded would be “additional service options” not currently offered to broadband customers. The proposal contained language suggesting that broadband service providers should have the right to manage their networks to preserve “a robust, open Internet” and to prevent the illegal sharing of copyrighted material as provided for under the Digital Millennium Copyright Act (Davidson & Tauke, 2010).

Ivan Seidenberg, CEO of Verizon, explained that the proposal excluded cellular networks because of the desire to encourage the further building out of wireless broadband networks. Chairman Genachowski and other

FCC commissioners, such as Michael Copps, expressed the desire to extend net neutrality rules to all Internet users. Genachowski said “it is essential that the Internet itself remain open, however users reach it” (Miller & Helft, 2010). But Genachowski had indicated prior to the announcement of the Google–Verizon proposal that he might consider exempting new services from net neutrality rules. New services might include health care monitoring, advanced educational services, or new entertainment and gaming options. Verizon was intent on offering its Fios consumer services under this heading and to assure that it would have the option to continue to sell dedicated network services to business customers (Reardon & Krazit, 2010).

Google was showing its willingness to compromise with the cable and telephone companies on wireless and special services issues in order to make progress on net neutrality. The immediate reaction to the proposal was strongly negative. Part of the problem was that some of the news coverage called it a “pact” or a “treaty” rather than a proposal. Many journalists and bloggers thought that it represented a deal negotiated by the two companies, possibly as a result of their earlier agreement to bring the Android operating system to Verizon cell phones, rather than a genuine proposal. Some net neutrality proponents interpreted the proposal as a “sell out” on Google’s part.

Proponents of net neutrality also strongly criticized the Google–Verizon proposal for excluding new services and cellular networks, while net neutrality opponents continued to criticize any form of legal net neutrality guarantees as unnecessary regulation. The attempts by Google, Verizon, and the FCC to convince net neutrality opponents that they favored a “light hand” for government regulation fell on deaf ears. It is not surprising, therefore, that Chairman Genachowski later criticized the Google–Verizon proposal for slowing down progress toward a negotiated settlement: “I would have preferred if they didn’t do exactly what they did when they did. It slowed down some processes that were heading to a resolution” (Sieglar, 2010).

Somewhat more helpful to the net neutrality cause was the support of the Chairman of

the House Energy and Commerce Committee, Henry Waxman (D-New York), for the FCC’s idea to reclassify broadband services as telecommunications services. At the end of September 2010, Waxman attempted to get a new bill guaranteeing net neutrality to the floor of the House before the fall recess. Waxman said that the bill would not go forward unless it had bipartisan support, so when Representative Joe Barton (R-Texas) informed him that Republicans were opposed to it, he made the following statement: “. . . the FCC should move forward under Title II. The bottom line is that we must protect the open Internet. If Congress can’t act, the FCC must” (Waxman, 2010).

## CONCLUSIONS

To return to the questions posed at the beginning of this article, there was clearly a strong relationship between the net neutrality debate and partisan politics. When the Republicans controlled Congress, net neutrality amendments to the Telecommunications Act were roundly defeated. The Republican members of the FCC were opposed to adopting specific rules to guarantee net neutrality. Although Michael Powell proposed his “four freedoms,” and Kevin Martin was willing to punish Comcast for throttling BitTorrent traffic, only the Democratic appointees to the FCC were strongly in favor of net neutrality rules. Republican efforts to keep net neutrality amendments out of the Video Franchise Bill in 2006 resulted in Democratic Senator Ron Wyden’s successful threat to filibuster the bill. Groups like Save the Internet and MoveOn.org had mobilized large numbers of grass-roots supporters for net neutrality. After Democratic electoral victories in 2006, net neutrality supporters were able to break the stranglehold on national broadband policy that the telephone and cable companies and their mostly Republican allies had held. Although there were some Republicans (like Olympia Snowe and James Sensenbrenner) who supported net neutrality, most opposed it.

Opposition to net neutrality fit nicely within the antiregulatory frame that had allowed Republicans to win control of the Presidency

and Congress. Democrats were not united in favor of net neutrality during the period of Republican dominance, but increasingly saw it as an issue (like stem-cell research) that could help them with the voters. New sources of campaign financing and new lobbying efforts from powerful Internet companies such as eBay, Google, and Amazon played a role as well. After the end of Republican Congressional majorities in 2006, but even more after the election of President Barack Obama in 2008, the Democrats felt bound to deliver on their campaign promises to support net neutrality. President Obama and the new Democratic head of the FCC, Julius Genachowski, attempted to reframe the debate in terms of preserving an "open Internet." The court decision on the Comcast case and the Republican victories in the midterm election of 2010, however, meant that legislated net neutrality guarantees would not be forthcoming any time soon, and that the only way to get net neutrality rules in the short term would be if the FCC reclassified broadband services as telecommunications services. The FCC recognized this in its decision of December 21, 2010. In a straight partisan vote of 3–2, the FCC voted to reclassify broadband services, as Chairman Genachowski had foreshadowed in his response to the Google–Verizon proposal (Castillo, 2010).

The U.S. debate over net neutrality illustrates the increasing use of the Internet in all its various forms in contemporary politics, but especially in politics involving the future of the Internet itself. Web sites, wikis, blogs, and other Internet tools were used increasingly to get the message out and to mobilize not just the activists but the public at large. Even though the Internet had not yet transformed electoral politics, but had only resulted in marginal and mostly tactical changes (Bimber, 2003), the debate over net neutrality was essentially a debate about what role the Internet would play in the future of democracy.

The debate over net neutrality in the United States is one example of the national debates over access to network infrastructure. It is an important example and therefore deserves careful observation and analysis if a more general theory of politics in this area is to emerge. In the United States, partisanship and partisan framing

of the issues were extremely important in defining the parameters of the debate. Partisanship and partisan framing were not as important in Western Europe's debate over similar issues. This suggests that institutional differences may be useful in explaining cross-country variance. Nevertheless, there are likely to be echoes of the issues that came to the fore in the United States in other parts of the world where partisanship is also an important factor. It will be interesting to see if international variance in policies and policy debates in this area can be explained in a parsimonious fashion.

## NOTES

1. According to Gigi Sohn, over 98 percent of home broadband users were connected to the Internet via cable or DSL modems in 2006.
2. This included the Consumer Electronics Association, the Business Software Alliance, the Telecommunications Industry Association, the Semiconductor Industry Association, the National Association of Manufacturers, and the Information Technology Industry Council.
3. When SBC purchased AT&T Corporation to form AT&T Inc. in August 2005, Whitacre was named Chairman and CEO of the new entity. He is currently CEO of General Motors.

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