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Neutrality: The Strange Philosophy Behind the Movement for Net Neutrality

By James G. Lakely*

1. Introduction

The election of Barack Obama as president ushered in a new era of regulatory zeal in Washington, with both Congress and the Federal Communications Commission (FCC) determined to solve alleged problems with access to and management of the Internet. Advocates of “network neutrality” have the federal government’s ear and seem closer than at times past to achieving their goal of greater government control over the Internet. Their success would change the online experience of every American.

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This study examines the philosophy that underlies the movement for network neutrality, which telecom expert Scott Cleland has dubbed “neutrality.” Neutrality stands in striking contrast to the innocuous-sounding Internet “freedom” its advocates call for. Understanding neutrality helps explain why network neutrality would have consequences that are quite the opposite of what its proponents claim. Not all advocates of network neutrality believe in neutrality, and

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some aren't even aware that the policy arose from such a strange philosophy. One purpose of this paper is to inform those neutrality advocates of the radical agenda they have unwittingly bought into.

Part 2 of this study presents some definitions of network neutrality and explains why this seemingly arcane industry issue has become a public policy debate with major implications for the future of the Internet. Part 3 introduces "neutralism," the philosophy behind network neutrality. Neutralism rejects the idea that private companies ought to own or operate the infrastructure, software, and content that comprise the Internet in the United States. Neutralists favor a "digital commons" model where no one should have to pay for access to the Internet or to consume its content.

Network neutrality would discourage investment and innovation, reverse recent progress made toward universal access, and amount to a regulatory "takings" of billions of dollars of private property.

Part 4 tells the history of neutralism from its beginning in the movement for copyright-free software ("shareware") to calls for "the abolition of all forms of private property in ideas" in *The dotCommunist Manifesto*. Major figures in the neutralism movement, including Richard Stallman, Eben Moglen, and Lawrence Lessig, are profiled and their work summarized. The evolution of

neutralsnomics by Yachai Benkler and the initial public policy agenda of neutralism presented by David Bollier are described.

Part 5 begins the critique of neutralism by exploring and debunking the argument that broadband Internet access has the characteristics of a public utility, and thus should be subject to neutralist principles. Broadband access in fact is quite different from conventional public utilities, beginning with the fact that access is ubiquitous and the ISP industry is intensively competitive, and ending with the fact that current law, policies, and precedent all say broadband should not be delivered via a noncompetitive utility model.

Part 6 explores how neutralists are trying to impose their will on the wireless industry. Despite government's poor record of regulating the wireless sector – causing delays in commercialization of cell phone technology and use of valuable spectrum – neutralists have called on the FCC to regulate applications, texting, and handsets with a heavy hand. Such policies are most likely to slow innovation and stand in the way of the goal of universal service.

Part 7 describes how adopting network neutrality laws would harm the Internet. Neutralists imagine government regulators returning us to a time when property rights and profits were foreign to the Internet, but there is no reason to go there, and many reasons not to. Network neutrality would discourage investment and innovation, reverse recent progress made toward universal access, and amount to a regulatory "takings" of billions of dollars of private property.

Part 8 presents a brief summary and conclusion.

Americans largely take for granted the constantly unfolding marvels of the Internet age. In just a few short years, the Internet has evolved from pricey dial-up service paid for by the hour to

broadband speeds hundreds of times faster and available at a fraction of the price. Not long ago, for instance, downloading an emailed photograph was a slow, frustrating experience. Today, millions of people can view a live video stream of a presidential speech and even chat about it with friends around the world in real time in a smooth, seamless experience.

Free-market forces, not government direction or a “digital commons,” brought about these advances. Adopting the philosophy of neutralism would take us far from the principles, rules, and institutions that made this progress possible. Perhaps without understanding it, policymakers who embrace neutralism would put the vibrant engine of the Internet economy permanently into neutral gear. Such a result would be disastrous.

2. What Is Network Neutrality?

In October 2007, presidential candidate Barack Obama was asked at a forum hosted by MTV if he would “make it a priority in [his] first year in office to re-instate net neutrality as the law of the land.” Obama answered with an enthusiastic “yes” and pledged to appoint to the FCC strong supporters of “open Internet principles like net neutrality.” In his answer, Obama presented his definition of net neutrality:

Policymakers who embrace neutralism would put the vibrant engine of the Internet economy permanently into neutral gear. Such a result would be disastrous.

I am a strong supporter of net neutrality. What you’ve been seeing is some lobbying that says [Internet providers] should be able to be gatekeepers and able to charge different rates to different Web sites ... so you could get much better quality from the Fox News site and you’d be getting rotten service from the mom and pop sites. And that I think destroys one of the best things about the Internet – which is that there is this incredible equality there ... as president I’m going to make sure that is the principle that my FCC commissioners are applying as we move forward.¹

Since his election, President Obama,² several influential members of Congress,³ and the majority of commissioners serving on the Federal Communications Commission (FCC)⁴ have pledged their allegiance to network neutrality. FCC Chairman Julius Genachowski, in his first major speech in office, said he wanted the commission to award itself the power to strictly enforce

¹ Obama presidential campaign event sponsored by MTV, October 29, 2007.

² “Remarks by the President on Securing Our Nation’s Cyber Infrastructure,” speech in the East Room, May 29, 2009, http://www.whitehouse.gov/the_press_office/Remarks-by-the-President-on-Securing-Our-Nations-Cyber-Infrastructure/

³ “Net Neutrality Bill Calls on FCC to Babysit ISPs,” *PC Magazine* (pcmag.com), July 31, 2009.

⁴ “Obama Nominates Net Neutrality Backer for FCC Chief,” *Wired.com*, March 3, 2009.

network neutrality.⁵ But what does the term mean?

Network neutrality is the label given to a set of ideas aimed at increasing the rights of Internet users to control the service they receive from Internet service providers (ISPs). Common Cause, a liberal lobbying group, defines it as “the principle that Internet users should be able to access any web content they choose and use any applications they choose, without restrictions or limitations imposed by their Internet service provider.”⁶

Network neutrality has become a public policy issue because its advocates call for giving the FCC power to enforce new regulations.

Network neutrality often is framed as a matter of free speech rights that are violated when network providers discriminate among messages based on their origin or content. For example, Free Press, an organization created to lobby for network neutrality, says “Net Neutrality is the reason the Internet has

driven economic innovation, democratic participation and free speech online. It protects the consumer’s right to use any equipment, content, application or service without interference from the network provider. With Net Neutrality, the network’s only job is to move data – not to choose which data to privilege with higher quality service.”⁷

Virtually all businesses favor network neutrality in the abstract, since it addresses a trust problem that is inherent in networked enterprises. Businesses that depend on the networks seek assurance that they will not face extortion from the networks in the long run. The networks, in turn, have no easy way to provide them with this assurance. This is not a new problem (railroads faced it too), and it is taken seriously even by proponents of free-market solutions.

Network neutrality has become a public policy controversy because some of its advocates call for regulations spelling out in detail what the principles mean for ISPs and giving the FCC power to enforce the new regulations.⁸ The current legal status of network neutrality is somewhat ambiguous. In 2005, the FCC endorsed four principles of network neutrality:⁹

- (1) consumers are entitled to access the lawful Internet content of their choice;

⁵ “Chairman Genachowski Outlines Actions to Preserve the Free and Open Internet,” speech at The Brookings Institution, September 21, 2009, http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-293567A1.pdf

⁶ Common Cause, “Keep the Internet Free and Open!” <http://www.commoncause.org/site/pp.asp?c=dkLNK1MQlwG&b=1234951>, last viewed August 30, 2009.

⁷ Free Press, “What is Net Neutrality?” <http://www.savetheinternet.com/faq>, last viewed August 30, 2009.

⁸ Lawrence Lessig and Robert W. McChesney, “No Tolls on the Internet,” *Washington Post*, June 8, 2006, p. A23.

⁹ FCC, *Policy Statement 05-151*, August 5, 2005, http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-05-151A1.pdf

(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; and

(4) consumers are entitled to competition among network providers, application and service providers, and content providers.

“Although the Commission did not adopt rules in this regard,” the FCC statement read, “it will incorporate these principles into its ongoing policymaking activities. All of these principles are subject to reasonable network management.” This remains federal policy today. While the principles are widely supported by ISPs and their customers, they do not have the force of law.¹⁰

In practical terms, turning the principles of network neutrality into regulations means different things to different people. Most advocates support giving the FCC regulatory power to prevent ISPs from limiting (“throttling”) service to heavy users or

Turning the principles of network neutrality into regulations means different things to different people.

charging customers different amounts for different levels of access. Some truly want very dumb pipes with flat-rate pricing; they don’t even want consumers to have the option of paying based on use. Other proponents are fine with differential pricing for different speeds or qualities of service, as long as all similarly situated customers are offered the same deal. Some are okay with limits on “bandwidth hogs” as long as those limits are disclosed clearly. There are also different views on what constitutes “reasonable” network management.

Critics believe giving the FCC authority to turn the principles into a regulatory code and then to enforce it could spell trouble for ISPs as well as consumers. They point to the disaster that was caused by the Telecom Act of 1996, when regulators tried to force telephone companies to open their networks to competitors. Thousands of pages of new regulations and years of litigation discouraged investment and innovation and helped cause the telecom crash of 2000-2003.¹¹

Hance Haney and George Gilder, both affiliated with the Discovery Institute, recently explained that “content and conduit are naturally separate: If you have the best content, you want it on everyone’s conduit, and if you have the best conduit, you want everyone’s content on it. There are no synergies between creating attractive and original content and building powerful and available broadband networks. The most profitable product in cable is not TV but open Internet service. The market will continue to push phone and cable companies to provide consumers with

¹⁰ Jerry Brito and Jerry Ellig, “A Tale of Two Commissions: Net Neutrality and Regulatory Analysis,” *CommLaw Conspectus*, Vol. 16 (2007).

¹¹ Hance Haney and George Gilder, “Ten Principles of Telecom Policy,” *Legislative Principles Series* No. 5, The Heartland Institute, 2009, p. 9.

more choice, not less.”¹²

Haney and Gilder, along with other experts, worry that adoption of network neutrality regulations could persuade investors to “stay on the sidelines, as occurred in the cable industry following re-regulation in 1992 and the phone industry following passage of the regulation-laden 1996 Telecommunications Act.”¹³ The rationale for new regulations in each of those cases was very similar to the one used by network neutrality advocates, but the results were just the opposite of what was hoped for. Investors returned to the cable industry only after price controls were repealed in 1996, and to the phone industry in 2004 after the FCC scaled back network-sharing rules.

Advocates of network neutrality regulations seem blind to the need for a regulatory environment that protects and rewards the private investments.

Advocates of codifying the principles of network neutrality into law seem blind to the threat that new regulations could pose to the regulatory environment that protects and rewards the private investments that deliver high-quality broadband service to growing numbers of people. The reason for this “blind

spot” is the philosophy behind network neutrality. Following the lead of Scott Cleland, we call it “neutralism.”

3. Neutralism: The Philosophy Behind Network Neutrality

In the simplest terms, neutralists see “digital information and communications networks as a public commons,” such as a park or an interstate highway.¹⁴ They oppose the idea – actually, the reality – that broadband networks, software, and content should be privately owned or operated by private companies competing for customers. Neutralists believe:

- digital technology, if unshackled from ownership restrictions and payment requirements, is a powerful means for creating a more egalitarian society;
- the end-to-end design of the Internet creates a digital commons that is open to decentralized innovation; and
- the Internet should not be controlled by market players because it is necessary for democratic discourse.

This view goes beyond seeing broadband Internet access as similar to electricity, a service so essential that governments (presumably) ought to regulate its private-sector providers as public

¹² Ibid. See also Timothy B. Lee, “The Durable Internet: Preserving Network Neutrality without Regulation,” *Policy Analysis* No. 626, Cato Institute, November 12, 2008. http://cato.org/pub_display.php?pub_id=9775

¹³ Haney and Gilder, *supra* note 12, p. 10.

¹⁴ Scott Cleland, *Neutralism: Identifying the Commons Ideology behind Net Neutrality*, February 2009, p. 1.

utilities, and calls for complete and outright government ownership. Neutralists take for granted the enormous investments made by private companies in hardware, software, content, marketing, and consumer services. They look at the digital economy and see the conditions they believe are necessary for a more egalitarian common ownership of the means of production and distribution of data – in short, the nationalization or socialization of the Internet.

Every radical movement needs a villain, and neutralists have chosen “Big Business.” Neutralists cast big telephone and cable companies as “monied interests” standing in the way of the public’s right to free access to the Internet.¹⁵ The Free Press Web site has this revealing discussion of “who wants to get rid of net neutrality?”:

The nation’s largest telephone and cable companies – including AT&T, Verizon, Comcast and Time Warner Cable – want to be Internet gatekeepers, deciding which Web sites go fast or slow and which won’t load at all.

They want to tax content providers to guarantee speedy delivery of their data. And they want to discriminate in favor of their own search engines, Internet phone services and streaming video – while slowing down or blocking services offered by their competitors.

These companies have a new vision for the Internet. Instead of a level playing field, they want to reserve express lanes for their own content and services – or those of big corporations that can afford the steep tolls – and leave the rest of us on a winding dirt road.

The big phone and cable companies are spending hundreds of millions of dollars lobbying Congress and the Federal Communications Commission to gut Net Neutrality, putting the future of the Internet at risk.¹⁶

Neutralists oppose “Big Broadband,” the telephone and cable companies that currently provide most of the “pipes” used to deliver broadband services to consumers. They believe the Internet communications infrastructure should be a public commons, either through government ownership or heavy regulation through public utility-style regulation. They also advocate a combination of collective activist user behavior and government mandates to break “Big Media’s” grip on information and culture by creating an information commons to unleash citizens’ bottom-up creative and innovative potential. And they oppose “Big Software,” such as Microsoft, believing there should be no proprietary ownership of

Neutralists believe the Internet communications infrastructure should be a public commons, through substantial government ownership or control or common carrier regulation.

¹⁵ Ibid.

¹⁶ Free Press, "Who Wants to Get Rid of Net Neutrality?" <http://www.savetheinternet.com/faq>, last visited August 30, 2009.

software and that users should instead be free to use, copy, change, or redistribute any software code as they see fit.¹⁷

Neutralists view the economics of information technology through their unique prism, which results in a set of beliefs that Cleland calls “neutralnomics.” Neutralnomics holds that “technology and innovation, in concert with a public commons for information and communication, can transform the traditional capitalistic economics of *scarcity* into the more egalitarian economics of *abundance*.”¹⁸

An underlying premise of neutralnomics is the Marxist notion that capitalism, when faced with resource abundance, must create artificial scarcity or face economic collapse. Neutralists do not view the economic phenomenon of competitive differentiation as competition, but as *avoiding* competition to extract unfair scarcity value. According to neutralnomics, owners of technological and intellectual property seek to strategically protect the value of their property by artificially limiting the potential innovation and creativity of others.

Neutralists consider information technology, and all fields of commerce, as a zero-sum game where in order for anyone to win, someone else has to lose. In this view, it is wrong for ISPs, software companies, and media outlets to retain the freedom to strategically leverage their technology property because this would mean less freedom for consumers.¹⁹ So the ability to own technology, and especially to charge market rates for it, must be “reformed” so that the Internet and its users can be “free.”

Neutralists envision a post-scarcity economy in which the capitalist institutions of price, competition, and private property rights are no longer necessary.

The conventional view of broadband is that ISPs should be free to divert from the flat-rate billing structure most customers experience, and experiment instead with variable pricing, usage-based pricing, or even caps on broadband use in order to tailor services and products to the wants of potential consumers. The drive to make greater profits propels the

search for new and better products, and the presence of competition gives consumers choices at reasonable prices. This is the fee structure employed even by public utilities such as electricity and water, where it is generally seen as being efficient as well as fair.

But neutralists view such natural market adjustments in broadband as an injustice. They consider market forces in technology antithetical to the resource abundance and unlimited Internet use that neutralnomics assumes are a given, now and forever. Neutralists envision a post-scarcity economy in which the capitalist institutions of price, competition, and private property rights are no longer necessary, and maybe were never necessary in the first place. Going forward, they

¹⁷ Cleland, *supra* note 14, p. 3.

¹⁸ *Ibid.*

¹⁹ *Ibid.*

believe public ownership or strict management of private providers are the most promising economic policies to ensure high quality and bountiful Internet access.

The neutralists claim the wonders of technology will continue to emerge from a “digital commons,” even though their policy prescriptions would destroy the incentives to profit from that labor. They do this by setting up a series of straw men – such as the idea that “Big Business” exerts complete control over the Internet and its products, and that “decentralized” creativity cannot flourish in a market.

People familiar with how the digital economy actually operates know that the market forces neutralists reject are the very same forces that ensure the decentralization of creativity that now exists in information technology. The world is awash in open-source or “digital commons” success stories – the Apache HTTP Server, the Mozilla Firefox Web browser, and the GNU/Linux operating system, to name just three. They emerged and thrive in a capitalist information technology sector constantly improved by the capital, competition, and choices created by a competitive marketplace.

The profit motive, not exploitation, has moved America’s largest ISPs to invest more than \$200 billion in broadband and wireless build-out in the past few years.²⁰ Only ideologues blind to this reality would believe greater innovations await us if only we destroy the system that created the technological wonders we now take for granted. Yet there are many in that camp, as the following section shows.

4. The History of Neutralism and its Advocates

The “father” of the neutralism movement is Richard Stallman, an iconoclastic figure who began to establish his reputation as a hacker during his first year at Harvard University in 1971. Stallman entered the Massachusetts Institute of Technology for post-graduate studies in 1974 and produced published works that helped advance the theories and programming that eventually would inform many of the basic functions of the modern Internet. Though Stallman dropped out, he continued working, programming (and hacking) at the MIT Computer Science and Artificial Intelligence Laboratory.

A self-described software freedom activist, Stallman, now 56, pioneered the free software movement. In 1983, he invented GNU, a non-proprietary computer operating system alternative to UNIX. In 1985, Stallman introduced into the lexicon of the technology sector the term “copyleft,” which he defined as a minimalist form of copyright designed to

In 1985, Stallman introduced the term “copyleft,” which he defined as a minimalist form of copyright designed to ensure that free software always remains free.

²⁰ Randolph J. May, The Free State Foundation, "Reply Comments on National Broadband Plan" to the Federal Communications Commission, July 21, 2009, p. 4, http://www.freestatefoundation.org/images/Reply_Comments_on_National_Broadband_Plan.pdf

ensure that free software always remains free as it is shared and improved downstream. Two years later, at the age of 28, Stallman founded the Boston-based Free Software Foundation, which to this day holds the copyrights to various essential pieces of the GNU operating system. The better-known Linux operating system was pioneered by Finland-born Linus Torvalds, who at the age of 21 in 1991 announced his creation of what was essentially an offshoot of Stallman's GNU free software development tree. The Linux effort effectively re-branded "free software" as "open source software," much to the chagrin of Stallman. Cleland writes that Torvalds, in an attempt to make Linux less political, offered his operating system as a more mainstream and stable alternative to compete in the market with Microsoft's dominant Windows operating system.²¹

A. The Premise of "Free Software"

Stallman has little use for the Founding Fathers' idea that intellectual property rights are one of the keystones of individual liberty.

The core premise of neutralism can be found in the definition of "free software" found on Stallman's Free Software Foundation Web site: "Free software is a matter of the users' freedom to run, copy, distribute, study, change and improve the software. ... Being free to do these things means... that you do

not have to ask or pay for permission."²²

In his 2002 essay, "Free Software, Free Society,"²³ Stallman lays out his neutralist vision for the future of information technology in which "society should not have owners for programs."

I am working to build a system where people are free to decide their own actions; in particular, free to help their neighbors, and free to alter and improve the tools that they use in their daily lives. A system based on voluntary cooperation and on decentralization.

Stallman wrote that for those who believe owners of software and developers of technology "are more important than anyone else, this paper is simply irrelevant." And in a rebuke to those who may find a Marxist flavor in the call for a "digital commons," Stallman turned the tables, writing: "If we are to judge views by their resemblance to Russian Communism, it is the software owners who are the Communists." As for the paradox that most of the public support the current system of private rights to intellectual property, Stallman writes:

But why would a large number of Americans accept a premise that elevates certain people above everyone else? Partly because of the belief that this premise

²¹ Cleland, *supra* note 14, p. 3.

²² *Ibid.*, p. 4.

²³ Joshua Gray, ed., *Free Software, Free Society: Selected Essays of Richard M. Stallman*, GNU Press, Free Software Foundation, 2002. All of the quotations from Stallman in this section are from this source.

is part of the legal traditions of American society. Some people feel that doubting the premise means challenging the basis of society.

Stallman has little use for the Founding Fathers' idea that intellectual property rights are one of the keystones of individual liberty, so important that patents and copyrights are affirmatively protected in the body of the Constitution (Article I, Section 8) rather than only in the Bill of Rights. According to Stallman, "we are not required to agree with the Constitution or the Supreme Court. (At one time, they both condoned slavery.)" Copyright law, by Stallman's lights, is "a radical right-wing assumption rather than a traditionally recognized one" and he hopes his manifesto "will weaken its appeal." He concludes:

The idea that the proprietary-software social system – the system that says you are not allowed to share or change software – is antisocial, that it is unethical, that it is simply wrong, may come as a surprise to some readers. But what else could we say about a system based on dividing the public and keeping users helpless?

B. The dotCommunist Manifesto

Part of the ideological grounding of neutralism appears in Eben Moglen's 2003 *The dotCommunist Manifesto*.²⁴ Moglen, a professor of law and legal history at Columbia University and director-counsel/chairman of the Software Freedom Law Center, was general counsel for Stallman's Free Software Foundation from 1984 to 2007.

Moglen writes in *The dotCommunist Manifesto* what one would expect from its title – a Marxist vision of technology policy that assumes the policies and rewards that were necessary in a market-based economy to bring about the infrastructure of the digital economy are no longer necessary, now that the job is done. He would stand on the shoulders of giants and usher in a new era in which communal contributions, free from profit motives, would make technology "free" for everyone.

Moglen would stand on the shoulders of giants and usher in a new era in which communal contributions, free from profit motives, would make technology "free" for everyone.

In Moglen's utopia, "creators of knowledge, technology, and culture discover that they no longer require the structure of production based on ownership and the structure of distribution based on coercion of payment." In its place, the free and chaotic association of individual programmers and an "anarchist model of propertyless production, makes possible the creation of free software, through which creators gain control of the technology of further production." Only then, says Moglen, can the Internet be free:

²⁴ Eben Moglen, *The dotCommunist Manifesto*, January 2003, emoglen.law.columbia.edu/publications/dcm.html. All of the quotations by Moglen in this section are from this source.

The network itself, freed of the control of broadcasters and other bandwidth owners, becomes the locus of a new system of distribution, based on association among peers without hierarchical control, which replaces the coercive system of distribution for all music, video, and other soft goods.

When society and law protect the “ownership of ideas” it results in the “suppression of free technology, which means the suppression of free speech,” Moglen writes. If the state allows a free market to flourish and protect intellectual property, the state is doing harm, i.e. it is “employed to prohibit free creation.” If copyright law and protection of intellectual property prevail, writes Moglen,

Scientists, artists, engineers and students are prevented from creating or sharing knowledge, on the ground that their ideas imperil the owners’ property in the system of cultural production and distribution. It is in the courts of the owners that the creators find their class identity most clearly, and it is there, accordingly, that the conflict begins.

According to Moglen, if the state allows a free market to flourish and protect intellectual property, the state is doing harm – i.e. it is “employed to prohibit free creation.”

The title of Moglen’s work is apt, as it is sprinkled throughout with the language of communism’s great (and sometimes bloody) revolutionaries. The people are “the creators of the free information society,” and it is time for them to “wrest from the *bourgeoisie*, by degrees, the shared patrimony of humankind.” Moglen and his compatriots on

the copyleft “intend the resumption of the cultural inheritance stolen from us under the guise of ‘intellectual property,’ as well as the medium of electromagnetic transportation.” The movement he hopes to help lead is “committed to the struggle for free speech, free knowledge, and free technology.”

While acknowledging that the “struggle” to bring about a dotCommunist revolution will take different forms in different countries, Moglen has a plan for how to get there. The following seven steps are key – and they represent a radical departure not just from current technology policy, but from the history of freedom and capitalism in the United States:

1. Abolition of all forms of private property in ideas.
2. Withdrawal of all exclusive licenses, privileges, and rights to use of electromagnetic spectrum. Nullification of all conveyances of permanent title to electromagnetic frequencies.
3. Development of electromagnetic spectrum infrastructure that implements every person’s equal right to communicate.
4. Common social development of computer programs and all other forms of software, including genetic information, as public goods.
5. Full respect for freedom of speech, including all forms of technical speech.

6. Protection for the integrity of creative works.
7. Free and equal access to all publicly produced information and all educational material used in all branches of the public education system.

Moglen doesn't explain how one goes about protecting the "integrity of creative works" without the legal underpinnings to protect copyrights and the personal possession of intellectual property. Perhaps that's what the government will decide by fiat. Or, it seems more likely that the question is moot when an Internet operated on communist principles destroys the idea of private ownership of property.

Regardless, give the author of *The dotCommunist Manifesto* credit for honestly expressing what he believes and brazenly confessing what it will take to get there – nothing less than revolution:

By these and other means, we commit ourselves to the revolution that liberates the human mind. In overthrowing the system of private property in ideas, we bring into existence a truly just society, in which the free development of each is the condition for the free development of all.

C. The Mainstream Popularization of Neutralism

While it's probably fair to say Moglen's radical work is an outlier – intended to provoke with its talk of "struggle" against the capitalist system and fomenting a "revolution" – its tenets are part of the mainstream thought among leftist intellectuals. But they are too clever to peddle discredited communist propaganda. Moglen's ideological brothers instead have employed the language of neutralism, a brilliant strategy for the very simple reason it is nearly impossible to rally passionate, popular support against something labeled "neutral."

Moglen's ideological brothers have employed the language of neutralism, a brilliant strategy for the very simple reason it is nearly impossible to rally passionate, popular support against something labeled "neutral."

Cleland pins the mainstream popularization of neutralism on Stanford Law School professor Lawrence Lessig, founder of the Stanford Center for Internet and Society and a nonprofit organization called Creative Commons.²⁵ The San Francisco-based Creative Commons, which also has an office in Berlin, Germany, has been at the vanguard of the copyleft movement since its founding in 2001 with the "generous support" of the Center for the Public Domain at Duke University Law School.²⁶

²⁵ Cleland, *supra* note 14, p. 5.

²⁶ Creative Commons, "About Us," <http://creativecommons.org/about/history/>, last viewed August 29, 2009.

Lessig is the author of several books advancing neutralist thought, including *The Future of Ideas: The Fate of the Commons in the Connected World* (2001, second edition 2002); *Free Culture: The Nature and Future of Creativity* (2004); and *Code Version 2.0* (2006), an update of Lessig's first book, *Code and Other Laws of Cyberspace* (1999). Lessig serves on the board of Stallman's Free Software Foundation, wrote the introduction to *Free Software, Free Society: The Selected Essays of Richard M. Stallman*, and received the Free Software Foundation's "Freedom Award" in 2003. Stallman also credits Lessig for being the "inspiration for the title and much of the argument" for his book, *Free Culture*. Lessig served on the Free Software Foundation board with Eben Moglen and quotes him in his books.

In addition to popularizing neutralism in his books, on his blog, and with quotes he provides to mainstream media outlets, Lessig can take credit for developing what might be called the "unified theory of neutralism." Lessig was the first to substantially meld the commons theory behind the free software movement with the idea of applying socialist and communist theory to the Internet's end-to-end design principle and its potential for social, political, and technological innovation. Lessig's 2001 book, *The Future of Ideas: The Fate of the Commons in a Connected World*, introduces the concepts of dotCommunism, or the "dot.common," by writing of the supposed virtues of "neutral" platforms.²⁷

Lessig was the first to substantially meld the commons theory behind the free software movement with the idea of applying socialist and communist theory to the Internet.

In a "neutral" world, Lessig writes, private ownership of intellectual property, the free market, and the concept of copyright are replaced by a new order dominated by the "digital commons." The digital commons, he writes, are "a resource for decentralized innovation. They create the opportunity for individuals to draw upon resources without

connections, permission or access granted by others. They are environments that commit to being open."²⁸ The new Internet, by nature, will form "an innovation commons ... protected by an architecture that forbade discrimination."

Lessig argues that network bandwidth, operating software, and spectrum should be thrown into the commons. Indeed, the "end-to-end" principle – one of the central design characteristics of the Internet which discourages interference with traffic flow – is "a stand-in for a commons." Lessig says a commons regime better facilitates innovation because it enables maximum experimentation, and that "open" markets can create more "value" than closed markets. Lessig quotes net neutrality advocate David S. Isenberg, author of the influential 1997 missive "The Rise of the Stupid Network," to make the point that innovation at the edge is superior to network innovation: "The milk of disruptive innovation does not flow from cash cows."

The Web has become an essential tool for public discourse in modern American democracy, and in Lessig's eyes this is yet another reason why the Internet must not be left in the control of

²⁷ Cleland, supra note 14, p. 5.

²⁸ Lawrence Lessig, *The Future of Ideas: The Fate of the Commons in a Connected World*, New York: Vintage Press, 2002, p. 85. All of the quotations by Lessig in this section are from this source.

market players: “The system of control we erect for rivalrous resources (land, cars, computers) is not necessarily appropriate for nonrivalrous resources (ideas, music, and expression).”

In other words, Lessig views communications infrastructure and content as fundamentally different from the rest of the economy because they involve ideas and democracy. And because protecting the free flow of ideas and democracy are vital, it is up to the government to establish a stricter sets of controls on the “incumbents” who threaten the “freedom” of users.

D. Coining the Term ‘Net Neutrality’

Credit for coining the term “net neutrality” in America’s political lexicon is largely laid at the feet of Tim Wu, who studied under Lessig when he taught at Harvard Law School in the mid- to late-1990s. Wu wrote an influential paper in 2002 titled “Network Neutrality, Broadband Discrimination,” and the term has since become the “brand” the neutralist movement uses in the press and larger culture.

A professor specializing in copyright law at Columbia Law School since 2006, Wu is also a writer for *Slate* magazine and served as a technology advisor to Barack Obama’s presidential campaign. In Wu’s 2006 book, *Who Controls the Internet? Illusions of a Borderless World*, co-authored by Jack Goldsmith, Wu co-dedicates the book to Lessig and calls him “a giant among Internet thinkers.”²⁹

The work of Lessig and Wu is having great influence among idealistic youth who have barely known a world without the Internet.

The work of Lessig and Wu is having great influence among idealistic youth who have barely known a world without the Internet and have little knowledge about how the free market spawned its growth. A group called Students for Free Culture (SFC) has spread to more than 40 colleges and universities.³⁰ SFC, according to its Web site (FreeCulture.org) was named after Lessig’s book *Free Culture* and exists to promote the ideology of Lessig and other neutralists. “SFC is part of a growing movement,” says the Web site, “with roots in the free software/open source community, media activists, creative artists and writers, and civil libertarians.”

SFC, much like Moglen, has its own “manifesto” in support of net neutrality, or neutralism. And it is just as ignorant of the market forces and disrespectful of the private property rights that made those technological marvels and freedoms possible. The manifesto reads:

The mission of the Free Culture movement is to build a bottom-up, participatory structure to society and culture, rather than a top-down, closed, proprietary structure. Through the democratizing power of digital technology and the

²⁹ Jack Goldsmith and Tim Wu, *Who Controls the Internet?: Illusions of a Borderless World*, Oxford University Press, 2006, p. 185.

³⁰ Cleland, *supra* note 14, p. 6.

Internet, we can place the tools of creation and distribution, communication and collaboration, teaching and learning into the hands of the common person – and with a truly active, connected, informed citizenry, injustice and oppression will slowly but surely vanish from the earth.

... The future is in our hands; we must build a technological and cultural movement to defend the digital commons.

E. The Economic Theory behind Neutralism

The formalization of the economic theory behind neutralism, i.e. “neutralnomics,” can be attributed to Yochai Benkler, professor for entrepreneurial legal studies at Harvard Law School and co-director of Harvard’s Berkman Center for Internet & Society.³¹ Benkler’s book, *The Wealth of Networks: How Social Production Transforms Markets and Freedom*, originally published in 2006, adheres to the neutralist tenet of “free use” – it’s available for free download on the Internet under a “creative commons” license, as well as in print (not free) from Yale University Press.

In his acknowledgments, Benkler credits Moglen for “a moment of true understanding,” Lessig for being “central” to his work, and Stallman for helping enable peer production of information.³² He recounts the coalescing of the neutralism movement:

There was a moment ... in 2001, when a range of people who were doing similar things ... seemed to cohere into a single intellectual movement, centered on the importance of the commons to information production and creativity in general, and to the digitally networked environment in particular.

Despite Benkler’s supposed oppression of the commons, it seems to be quite vibrant – as reflected in the fact that the copyleft movement is free to share its work without payment if it so chooses.

Benkler says the “central question” of the neutralist movement is whether there will be a “core common infrastructure that is governed as a commons and therefore available to anyone who wishes to participate in the networked information environment outside the market-based, proprietary framework.” He views “expansions of rights to operate” – a continuation of the current

copyright, market-based status quo in which people pay for the intellectual property of others – as “a tax on nonproprietary models of production in favor of the proprietary models.”

Despite this supposed oppression of the commons, it seems to be quite vibrant – as reflected in the fact that the copyleft movement is free to share its work without payment if it so chooses. As

³¹ Ibid.

³² Yochai Benkler, *The Wealth of Networks: How Social Production Transforms Markets and Freedom*, Yale University Press, 2007. All of the quotations by Benkler in this section are from this source.

noted above, Benkler shares the digital edition of his book freely with the world. Indeed, Benkler notes that the ubiquity of “low-cost processors, storage media, and networked connectivity have made it practically feasible for individuals, alone and in cooperation with others, to create and exchange information, knowledge and culture in patterns of social reciprocity, redistribution, and sharing rather than market-based production.”

Yet, inevitably, it is that pesky “market-based production” model that is holding true freedom back, in Benkler’s view. Destroy the free market, and a big part of the socialist dream is achieved, at least online:

It will likely result in a significant redistribution of wealth, and no less importantly, power, from previously dominant firms and business models, to a mixture of individuals and social groups on one hand, and the other hand businesses that reshape their business models to take advantage of, and build tools and platforms for, newly productive social relations.

Benkler realizes it’s too late to impose socialist, state-run plans for, say, agriculture policy or industry. But the Internet is a vast, unplowed field upon which Marxist ideologues can project their fondest dreams, undeterred by the failure of Marxism in practice in the real world. The Internet, then, is socialism’s last, best chance to stage a comeback. All the neutralists need to do, according to Benkler, is seize “the opportunity to change the way we create and exchange information, knowledge and culture.” No small thing, but Benkler writes:

The Internet is a vast, unplowed field upon which Marxist ideologues can project their fondest dreams, undeterred by the failure of Marxism in practice in the real world.

By doing so, we can make the [twenty-first century] one that offers individuals greater autonomy, political communities greater democracy, and societies greater opportunities for self-reflection and human connection. We can remove some of the transactional barriers to material opportunity, and improve the state of human development everywhere. Perhaps these changes will be the foundation of a true transformation toward more liberal and egalitarian societies.

F. The Goal: Eliminating Telephone and Cable Companies

One of the leading organizations in favor of imposing a regime of net neutrality on the Web is a Washington, DC-based non-profit organization called Free Press. The self-described “media reform” group is funded by some of the leading left-leaning foundations in the United States, including the Tides Foundation, Streisand Foundation, and George Soros’s Open Society Foundation.³³

³³ Free Press, Annual Report, 2007. <http://freepress.net/files/2007annualreport-web.pdf>

Free Press was founded by Robert W. McChesney, the Gutsell Endowed Professor in the Department of Communication at The University of Illinois at Urbana- Champaign, who now serves on the board of Free Press. In a recent interview with *The Bullet*, a Marxist publication in Canada, McChesney notes “the media is one of the key areas in society where power is exercised, reinforced and contested.”³⁴ Though McChesney calls himself a “progressive,” he has a great affinity for the media structure of the nineteenth century:

In the 19th century, a very different media system was in place. 19th century socialists wouldn't be talking much about the need to criticize the New York Herald Tribune because they weren't organizing people who read the New York Herald Tribune. It was much easier and more common for the Left to have its own media. The workers had worker papers. They weren't consuming mass produced commercial media products. But this started changing in the first half of the 20th century. Capital accumulation colonized much more of popular culture and communications. Capitalism became the dominant mode of producing and distributing information in society.

Robert McChesney says, “We want an Internet where you don't have to have a password and that you don't pay a penny to use. It is your right to use the Internet.”

What's the problem with existing media? McChesney says it does not promote the interests of the people because what we have today is a “corporate media.” McChesney, the author of many books and a popular speaker, has delivered many speeches railing against the corporate media. He says in his interview with *The Bullet* that his audiences agree with

his views – that the corporate media is “an integral part of how capitalist power is upheld in society” – but they ask, “What do we do about it?” They believe, McChesney says, that “when we make the [socialist] revolution or the revolution just happens, the problem of the media will be resolved then.” But this reasoning, according to McChesney, is wrong. He says:

This was an unsophisticated answer. Of course, very few people on the Left were that simplistic. Many understood that the battle over the media, just like the battle over the workplace, was a key part of engaging with and contesting power. Educating people about the media and fighting to make changes in the short-term, not just in the long term, became of utmost importance. Instead of waiting for the revolution to happen, we learned that unless you make significant changes in the media, it will be vastly more difficult to have a revolution. While the media is not the single most important issue in the world, it is one of the core issues that any successful Left project needs to integrate into its strategic program.

Net neutrality, finally, is a key tool to make those “significant changes in the media” that are necessary to bring about the “revolution.” McChesney says:

³⁴ Tanner Mirrlees, "Media Capitalism, the State and 21st Century Media Democracy Struggles," *The Bullet*, E-Bulletin No. 246, August 9, 2009, <http://www.socialistproject.ca/bullet/246.php> All quotations of Robert W. McChesney in this section are from this source.

The battle for network neutrality is to prevent the Internet from being privatized by telephone and cable companies. Privatization would give them control over the Internet, would allow these firms to privilege some information flows over others. We want to keep the Internet open. What we want to have in the U.S. and in every society is an Internet that is not private property, but a public utility. We want an Internet where you don't have to have a password and that you don't pay a penny to use. It is your right to use the Internet.

What happens to telephone and cable companies in a world where the Internet is free? McChesney explains:

At the moment, the battle over network neutrality is not to completely eliminate the telephone and cable companies. We are not at that point yet. But the ultimate goal is to get rid of the media capitalists in the phone and cable companies and to divest them from control.

These are quite radical positions to take, even in a public policy arena where the Left has not been shy about stating its objectives. One wonders if Free Press has stayed true to the mission of its founder and board member, "to completely eliminate the telephone and cable companies," and if so, why the organization's radical views aren't mentioned by the "corporate media," which frequently quotes its spokespersons calling for the seemingly benign policy of net neutrality.

G. The Initial Public Policy Agenda of Neutralism

The initial and formative public policy agenda of neutralism is captured in the writings of David Bollier, co-founder of another nonprofit group devoted to promoting net neutrality called Public Knowledge.³⁵ Bollier produced a paper in 2002 for the liberal New America Foundation and Public Knowledge titled "Saving the Information Commons: A New Public Interest Agenda in Digital Media."³⁶ Bollier and his co-author, Tim Watts, credit Moglen and Benkler for providing expert advice.

David Bollier and Tim Watts lay out an agenda to promote freedom on the Internet by having government dole out that freedom.
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Bollier and Watts lay out an agenda to promote freedom on the Internet by having government dole out that freedom. They describe seven policy principles they say would save the "information commons":

1. preserve significant slices of the communications infrastructure for non-commercial

³⁵ Cleland, *supra* note 14, p. 7.

³⁶ David Bollier and Tim Watts, "Saving the Information Commons: A New Public Interest Agenda in Digital Media," New America Foundation and Public Knowledge, 2002.

varieties of communication, and provide sufficient legal and financial support for creativity in these spaces;

2. assure that markets are truly open, competitive and diverse, and not closed and concentrated;
3. allow new technologies to evolve and innovate without being quashed or subverted by existing media industries;
4. ensure that First Amendment freedoms are fully applied to individual citizens – the primary constituent of our democratic polity – and only secondarily to media corporations;
5. revisit the cultural bargain of copyright and trademark law to assure that the public gets a fair return for the monopoly rights it gives;
6. devise innovative policy structures that can affirmatively protect the information commons against proprietary free riders, as the General Public License has done for open source software and as the spectrum commons proposes to do for wireless communications; and
7. assure that the public reaps a fair return on the private uses of public assets, such as the electromagnetic spectrum.³⁷

How far this philosophy will ascend is still an open question, but the advocates have a lot going for them.

Bollier followed up that paper with several books aimed at knocking down the idea of private ownership of intellectual property and a market-based Internet, including: *Silent Theft: The Private Plunder of Our Common Wealth* (2002), *Artists, Technology and the Ownership of Creative Content* (2003), *Brand Name Bullies: The Quest to*

Own and Control Culture (2005), *Ready to Share: Fashion and the Ownership of Creativity* (2006), and *Viral Spiral: How the Commoners Built a Digital Republic of Their Own* (2009).

A passage from Bollier's latest book, *Viral Spiral*, summarizes its core conclusion:

A world organized around centralized control, strict intellectual property rights, and hierarchies of credentialed experts is under siege. A radically different order of society based on open access, decentralized creativity, collaborative intelligence and cheap and easy sharing is ascendant.³⁸

How far this philosophy will ascend is still an open question, but the advocates have a lot going for them. The production of information technology, and the way Americans consume it, is still relatively new, poorly understood, and in a constant state of change. Policymakers in Washington are seeking guidance on how to be relevant players in the Information Age. The

³⁷ Ibid., p. 6.

³⁸ David Bollier, *Viral Spiral: How the Commoners Built a Digital Republic of Their Own*, The New Press, 2009.

neutralists have their ear and have laid out a blueprint for exerting that control by casting capitalism as an evil force from which the government must protect the public.

5. Neutralism and the Public Utility Argument

Neutralists know they cannot have their way on the Internet all at once, so the strategy is to achieve the goal of a government-run system incrementally. That journey begins by convincing the public that the private telecommunications and cable companies that currently deliver broadband access ought to be regulated the same way as electric and water utilities. The public utility argument has been advanced by supporters of the Internet Freedom Preservation Act of 2009 (the Markey-Eshoo bill); groups like Free Press, Public Knowledge, and the Open Internet Coalition; Google's ubiquitous "Internet evangelist" Vint Cerf; and other net neutrality proponents.

However, real economics, not neutralnomics, has something to say about whether broadband access has the characteristics of services best delivered by utilities or by competitive industries. Data and evidence make a compelling case that the public utility model of regulation is inappropriate for broadband.

First, public utility regulation historically was justified by claims that an essential service would otherwise not be made universally available at reasonable prices. But broadband access is currently available by telephone, cable, satellite, or other wireless providers to more than 90 percent of the zip codes in the U.S. Nearly 80 percent of people living in the U.S. have a choice of five or more wireless companies competing for their business.³⁹ Many now also have a satellite dish for digital TV or high-speed Internet access.

While access to broadband is ubiquitous, not all people sign up for the service. Comcast, which leads in market share among broadband Internet service providers, averages just 18 percent penetration across all of its markets. For all broadband providers combined, the national broadband penetration rate is about 45 percent.⁴⁰ This is in sharp contrast with electricity and water, the two iconic services delivered by utilities. Because they are truly essential services, a public utility can count on having paying customers in every home. This makes it relatively easy to calculate cash flow from new investments. Estimating income from new investments in broadband can be

Broadband access is available ... to more than 90 percent of the zip codes in the U.S. Nearly 80 percent of people living in the U.S. have a choice of five or more wireless companies competing for their business.

³⁹ Sonia Arrison, "Something Happened on the Way to Wireless Broadband," *TechNewsWorld*, May 21, 2004.

⁴⁰ Joseph Bast, "Municipally Owned Broadband Networks: A Critical Evaluation (Revised Edition)," *Heartland Policy Study #105*, The Heartland Institute, October 2004.

very risky, and errors explain the high failure rate of municipal broadband projects.⁴¹

Broadband fails to fit the standard utility model in other ways as well. Conventional utilities are based on single-use facility, while broadband provider facilities are multi-use. The converged telecom plant offers phone, wireless, high-speed, and video; the converged cable plant offers video, phone, high-speed, and increasingly wireless; the converged wireless plant offers wireless, high-speed, and video; and the converged satellite plant increasingly offers video and high-speed.

Utilities deliver uniform units, whereas broadband delivers completely variable units. Since electric utilities transmit only electricity, water utilities transport only water, and gas utilities transport only gas, they all require only availability management. Broadband is intrinsically different. Broadband bandwidth is inherently variable, requiring network management. Without network management, different commingled services sharing bandwidth cannot be assured their expected or contracted-for quality-of-service. Unlike utility services, broadband network congestion can cause latency problems for voice or real-time services and jitter quality problems for video or high-bandwidth applications.

Also unlike utility services, broadband networks must contend with outside contamination and disruption of most parts of their networks – and most of the time. Broadband networks must continuously, and throughout the network, manage and combat viruses, worms, malware, bot nets, denial-of-service attacks, and spam, among other harmful intrusions and infections.

Unlike utility services, broadband networks must contend with outside contamination and disruption of most parts of their networks – and most of the time.

Electric, gas, and water utilities are “dumb” networks in that a central utility manager does not know if an area has or does not have functional electricity, gas, or water unless someone is at the distant location to confirm it – either through a customer complaint call or a service technician. Moreover, these utilities’ transmissions largely cannot be

prioritized to help first responders or aid particular areas suffering from an emergency.

Broadband networks, by contrast, are inherently “smart” networks in that they can detect when an edge connection is functioning or not, and can be managed to prioritize to help first responders in an emergency.

Another distinction is that utilities are characterized by standard uniformity and glacial rates of change. By contrast, competitive broadband facilities are characterized by diversity, differentiation, and innovation because they operate in a continuously changing competitive environment.

⁴¹ See Steven Titch et al., *Not In The Public Interest –The Myth of Municipal Wi-Fi Networks*, New Millennium Research Council, 2005; Ryan Krause, “State & Local Broadband Initiative Failures,” *Research & Commentary*, The Heartland Institute, July 2008.

While utilities seldom innovate, competitive broadband providers must constantly innovate and promote “smart” network innovation. There are the challenges of ever-increasing compression with copper-based DSL; ever-increasing bandwidth optimization with cable via the DOCSIS process, currently in the 3.0 iteration; ever-increasing bandwidth with fiber and optical management; and competing wireless broadband technology standards in LTE and WiMax.

Telecom analyst Steven Titch summarized other reasons why broadband doesn’t conform to the utility model:

- Utilities require high investment upfront, but low investment thereafter combined with lengthy amortization of infrastructure. Broadband requires not only high investment upfront, but continued high investment thereafter. Technology cycles are short, and frequent upgrades and change-outs are necessary.
- When municipalities buy water and electricity from other providers, rates are usually regulated and, when not regulated, at least predictable. Municipal broadband, by contrast, calls for technology, software, and sometimes content to be purchased from a diverse supply chain market where prices can be volatile and unpredictable.
- Municipal water and electricity are generally provided in a monopoly environment. Municipal broadband, by contrast, is generally a competitive alternative that requires extensive promotion and advertising to maintain and grow revenues and market share.⁴²

Titch has summarized these and other differences between conventional public utilities and broadband in the table shown in Figure 1.

The evidence clearly shows that broadband is not a candidate for public utility regulation of prices, terms, and conditions. It comes as no surprise, then, that current law, policy, and precedent all say broadband is not and should not be a public utility. In the early 1990s, the Clinton administration decided to privatize the Internet backbone via the National Science Foundation. This was the consensus path, and it enjoyed strong bipartisan support.

The evidence clearly shows that broadband is not a candidate for public utility regulation of prices, terms, and conditions.

Passage of the 1996 Telecom Act was nearly unanimous in Congress, and it was signed by President Clinton. It changed U.S. law and policy to move away from monopoly utility regulation and towards competition. The law established that “it is the policy of the United States to preserve the vibrant and competitive free market that presently exists for the Internet ... unfettered by Federal or State Regulation.”⁴³

⁴² Steven Titch, "Municipal Broadband Is Not a Public Utility," *InfoTech & Telecom News*, June 2005.

⁴³ Telecommunications Act of 1996, p. 101. <http://www.fcc.gov/Reports/tcom1996.pdf>

Figure 1 Not the Same: Conventional Public Utilities vs. Broadband		
Characteristic	Water, Power, and Landline Dial-Tone	Broadband Service
Upfront Investment	High	High
Ongoing Investment	Low	High
Incremental cost of additional users	Low	High
Marketing costs	Low	High
Business Model	Stable, predictable from year to year	Unstable, prone to disruption
Value Proposition Necessary for sustained market share	No	Yes
Allows long-term (>20 years) plant amortization	Yes	No
Predictable costs and revenues	Yes	No
Barriers to competitive entry	High	Low
Consumer Price Elasticity	Low	High
Speed of technology cycles	Slow	Fast
Nature of Competition	Regulated and price controlled, where permitted	Unregulated, no price controls
<i>Source: Steven Titch, "Municipal Broadband Is Not a Public Utility," InfoTech & Telecom News, June 2005.</i>		

All of the FCC's decisions to declare broadband an unregulated information service for DSL, cable, wireless, and broadband over power lines (BPL) were bipartisan. Finally, the FCC's authority to make these broadband decisions was upheld by the U.S. Supreme Court in the *Brand X* decision.⁴⁴

The public utility model isn't even consistent with the neutralists' own ideas and arguments. Many of the people who want to turn the current "dumb" electrical grid into a "smart" electrical grid want to turn the current "smart" broadband grid into a "dumb" end-to-end network grid. Equally confounding and contradictory, many of those who want broadband to be regulated as a public utility don't want broadband to be usage-priced.

These contradictions are resolved if one understands that broadband-as-a-public-utility is only a halfway house to what neutralists really want, which is (in McChesney's words) "to completely eliminate the telephone and cable companies" so that "you don't pay a penny to use" the Internet. That is less a public utility model than it is a call for government ownership of

⁴⁴ United States Supreme Court, *National Cable & Telecommunications Assn. v. Brand X Internet Services* (04-277) 545 U.S. 967 (2005), <http://www.law.cornell.edu/supct/html/04-277.ZS.html>

broadband infrastructure, the case for which is even weaker than the one for utility regulation.⁴⁵ But calling for more regulation of ISPs and comparing them to the utilities that supply our homes with electricity and water is less likely to provoke opposition than calling for “abolishing telephone and cable companies” or “digital welfare for everyone.” That the public utility model wouldn’t work is only a minor inconvenience to the neutralists, who expect it to be only a temporary pause on the way to the creation of a socialized Internet.

6. Neutralists Target the Wireless Sector⁴⁶

Just a few years ago, the wireless industry was not even a player in the broadband and Internet consumption business. Today, wireless is looking more and more like the future of broadband technology. James Glassman recently reported in *Forbes*:

Today, there are 270 million wireless customers--up from 100 million eight years ago. They used 2.2 trillion wireless minutes last year--10 times as many as in 2000. Per-minute wireless prices, lower than in any other major country, have dropped 89% since 1994. Wireless carriers employ more than 268,000 people, a figure that has grown an annual average of 6% for the past four years.⁴⁷

The neutralists have had to jigger the arguments they use against wireline phone and cable companies to make them work against this new sector of the industry, all the while carefully ignoring that the sector’s very existence is evidence of the competition and innovation they claim is suppressed by the status quo.

The attempt by neutralists to apply network neutrality to the wireless sector demonstrates the negative consequences of that flawed policy prescription.

Neutralist dogma dictates that all parts of the private sector are under the influence of monopoly power. Monopoly stifles innovation. Therefore, there must be a lack of innovation in the wireless sector. But the American wireless consumer understands, better than the neutralists do, that the current wireless market in the U.S. is among the most innovative, fast-changing, competitive, and consumer-responsive industries in the economy today.

Not only does neutralism not work as a model for understanding the wireless sector, but the attempt by neutralists to apply network neutrality to the wireless sector demonstrates the

⁴⁵ See Bast, *supra* note 40, and Jerry Ellig, "A Dynamic Perspective on Government Broadband Initiatives," *Policy Study* #349, Reason Foundation, December 1, 2006, <http://reason.org/files/cf0c4a2d38f923ab20a190e88b7e877e.pdf>.

⁴⁶ This section borrows liberally, and with the author’s permission, from the ideas and language that appear in Scott Cleland, "Top 10 Pitfalls of Wireless Innovation Regulation," August 26, 2009, available online at <http://www.precursorblog.com/content/top-ten-pitfalls-wireless-innovation-regulation>.

⁴⁷ James K. Glassman, "Uncle Sam Should Leave Wireless Companies Alone," *Forbes*, July 16, 2009.

negative consequences of that flawed policy prescription.

A. A History of Failed Regulation

Slow-moving government processes are generally antithetical to creating an environment conducive to innovation. History shows that allowing consumers to choose the best technologies – by voting every day with their pocketbooks in the fast-paced marketplace – fuels the most innovation. This is especially clear in the history of government regulation of wireless communications. Some examples:

- Even though cellular phone technology was invented in 1960, the FCC did not allow it to be effectively commercialized until more than 20 years later.
- Serious FCC errors in the Personal Communications Service (PCS) auction implementation meant Nextwave’s licensing of 30 Mhz (one-quarter of the prime PCS spectrum that was supposed to be auctioned and put to work in the marketplace) laid fallow in legal limbo for several years.
- Eight years after 9-11, the FCC has not been able to get workable interoperable spectrum implemented so first responders can communicate seamlessly and coordinate during an emergency.
- The FCC’s over-regulation of the “D” Block auction of 700 MHz spectrum for public safety failed to attract the minimum bid because the commission’s model was deemed unworkable by the marketplace.
- Municipal WiFi mesh networks have consistently proven to be more technically and operationally difficult to operate than government officials have expected.

Municipal WiFi mesh networks have consistently proven to be more technically and operationally difficult to operate than government officials have thought.

Daniel Ballon, a policy fellow in technology studies at the free-market Pacific Research Institute, observes that the growth of the wireless sector has been due partly to the absence of government regulations that have crippled landwire telephone service. Applying network neutrality rules to the wireless sector, he says, would be disastrous:

... the digital wireless industry has never been subjected to government manipulation, allowing a thriving and competitive market to evolve. Treating wireless carriers as public utilities would short-circuit this market, placing control over rapidly evolving technologies in the hands of government regulators. As a result, future wireless innovations would be dictated by bureaucrats and lobbyists,

not driven by popular demand.⁴⁸

B. A Competitive Marketplace

In nearly every city and suburb in America, consumers have a choice among four large, facilities-based national providers – Verizon, AT&T, Sprint Nextel, and T-Mobile – and in many markets there is another facility-based provider like Leap or MetroPCS. On top of that, Clearwire is building yet another national wireless provider facility. In the *Forbes* article cited above, Glassman notes “\$200 billion has been invested in wireless networks,” and “these are signs of robust, not thwarted, competition.”

The latest (2009) FCC report on competition in the wireless industry found “U.S. consumers continue to reap significant benefits – including low prices, new technologies, improved service quality, and choice among providers – from competition in the CMRS [Commercial Mobile Radio Services] marketplace, both terrestrial and satellite CMRS. The metrics below indicate that there is effective competition in the CMRS market and demonstrate the increasingly significant role that wireless services play in the lives of American consumers. In particular, these metrics indicate that wireless technology is increasingly being used to provide a range of mobile broadband services.”⁴⁹ More specifically, the FCC found:

The FCC found “U.S. consumers continue to reap significant benefits – including low prices, new technologies, improved service quality, and choice among providers – from competition.”

- Approximately 99.6 percent of the total U.S. population have one or more different operators (cellular, PCS, and/or SMR) offering mobile telephone service in the census blocks in which they live.
- Approximately 98.5 percent of the U.S. population living in rural census blocks, or about 60 million people, have one or more different operators offering mobile telephone service in the census blocks within the rural counties in which they live.
- More than 95 percent of the U.S. population lives in census blocks with at least three mobile telephone operators competing to offer service, and more than 60 percent of the population lives in census blocks with at least five competing operators.
- On average U.S. mobile subscribers paid about \$0.06 per minute for mobile voice calls in December 2007 based on an estimate of average revenue per minute (“RPM”). RPM

⁴⁸ Daniel Ballon, "Wireless with Strings Attached: Net Neutrality and the Grounding of Wireless Innovation," Pacific Research Institute, 2008, p. 27.

⁴⁹ FCC, Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services, January 2009, p. 5. The data in the following bullet points are from the same source. http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA_09_54A1.pdf

declined by one cent from \$0.07 in 2006 to \$0.06 in 2007, continuing the price trend since 1994.

- Mobile calls were significantly less expensive on a per minute basis in the United States than in Western Europe (where RPM averaged \$0.20 in the last quarter of 2007) and Japan (\$0.26).
- Mobile Internet penetration is higher in the United States (15.6 percent of wireless subscribers) than in Western European countries such as the United Kingdom (13 percent), Italy (12 percent), France (9.6 percent), and Germany (7.4 percent).
- In the smart phone sector, there are more than 30 manufacturers offering more than 630 choices of handsets.⁵⁰ And there at least seven competing smart phone operating systems: Symbian, Windows Mobile, Palm, RIM, Apple, Linux, and Android. Soon, there will be even more.

Ironically, the so-called “netopolies” – Google with more than 70 percent of the Internet advertising market, and eBay/Skype with a 95 percent share of online auctions – face the least relative competition in their market segments. Yet they claim the wireless market is anti-competitive and call for new regulations giving them access to wireless consumers at more advantageous terms. This obvious rent-seeking to hamper more successful competitors should be apparent to and opposed by neutralists, but it is not. Neutralists and some big tech companies have found common ground on this, even if they come to it from opposite ends of the philosophical spectrum.

C. Apps, Texting, and Handsets

A policy that favors innovation in one segment at the expense of other technological areas is, by definition, a zero-sum innovation policy, not a growth policy.

Apple has approved the creation of more than 65,000 applications (apps) for its wildly popular iPhone.⁵¹ Yet this year, it denied one – Google Voice – for the very good reason it would supplant the iPhone’s core software design and functionality. That decision by Apple prompted the FCC in the summer of 2009 to launch a net neutrality-related

inquiry, creating the impression that anything less than approval of *all* applications may be presumed to be a violation of the FCC’s broadband principles. That is alarming, and absurd.

Google and eBay/Skype maintain that the application market is where most technological innovation is happening now – not in devices (which ignores Apple’s iPhone and iPod

⁵⁰ CTIA, "Written Ex Parte Communication, RM-11361; GN Docket No. 09-51; WC Docket No. 07-52," May 12, 2009, http://files.ctia.org/pdf/filings/US_Wireless_Industry_and_the_World_Ex_Parte.pdf

⁵¹ Jeff Bertolucci, "Apple: More Than 1.5 Billion Apps Served," *PCWorld*, July 14, 2009.

innovations); not in ISPs (ignoring Verizon’s MiFi innovation); and not among content providers (ignoring Time Warner/Comcast’s “TV Everywhere” innovation). The reality is that the market and consumers want and need innovation throughout the digital ecosystem, not just from one favored market segment. A policy that favors innovation in one segment at the expense of other technological areas is, by definition, a zero-sum innovation policy, not a growth policy.

Wireless net neutrality proponents are trying to get the FCC to mandate unlimited app choice as an absolute entitlement, and to brand as “anti-competitive” any imperfect outcome of a dynamic real-world competitive process. Yet limitations on consumer choice for reasonable and legitimate economic, innovative, differentiation, and operational reasons are *not* anti-competitive. They are just the normal result of everyday competition and economics.

Text messaging policies are also coming in for more government scrutiny, egged on by the neutralists. Sen. Herb Kohl (D-WI) has written several letters to the FCC, as well as to the “Big Four” wireless companies, complaining that some wireless customers are charged as much as 20 cents per text. What Kohl doesn’t seem to realize, and what the FCC will certainly learn, is that 99 percent of all texting is done by consumers who purchase an unlimited, flat-rate plan. Under those terms – upon which a consumer and a wireless company freely agree – the cost averages out to roughly a penny a text, down from about 3 cents per text a couple of years ago. Once again, the market is working, yet the neutralists are trying to exploit the exception (20-cent texts for those who purchased an *al a carte* plan, yet text like crazy) to impose new rules on the whole industry.

Kohl, the FCC, and the Justice Department are also investigating “exclusive handset” deals, such as the one between AT&T and Apple. If you buy an iPhone, you have to agree to a wireless contract with AT&T. If you don’t like the arrangement, you can try another phone. Neutralists say these kinds of arrangements harm consumers, but it’s just not true.

If a manufacturer or carrier does not have the latitude to reasonably restrict applications, then a provider effectively would have no property rights under the U.S. Constitution.

Of the 600 or so wireless handsets available for purchase in the U.S., only a small handful of the most expensive ones have exclusivity arrangements requiring that they be sold only in conjunction with a particular carrier. These exclusive deals were not guaranteed to be profitable for both companies. If the iPhone flopped, for example, both Apple and AT&T would have lost hundreds of millions of dollars. It was a risk they shared – and both the companies and consumers have reaped the benefits.

If a manufacturer or carrier does not have the latitude to reasonably restrict applications to ensure they abide with contracted terms of use and a viable business model/offering, then a provider effectively would have no property rights under the U.S. Constitution. That wireless provider also would have no meaningful design, operating, or business role to differentiate its product or service from competitors. This app-centric view of consumer choice and wireless innovation would undermine consumers’ diversity of choice by undermining the incentive for manufacturers and ISPs to innovate.

D. An Open-Ended Invitation to Regulate

Does wireless net neutrality mean application design trumps device or network design? If the FCC determines that Apple does not have the property right to own and design wireless handsets or software, or does not have the right to limit any third-party application, the FCC will chill manufacturing innovation, entrepreneurship, and risk-taking, resulting in a big net loss in innovation and growth in the economy.

As more and more smart phones, netbooks, notebooks, and laptops are enabled to exploit wireless broadband, where would the line logically be drawn where the FCC's wireless innovation regulation would stop? Let's suppose the FCC rules Apple cannot prevent a competitor, such as Google's Android, from effectively taking over the design and functionality of the iPhone by supplanting the iPhone's proprietary innovation with Google Voice. Why, then, should any investor undertake the immense cost to build a new device if the FCC expects the value from the manufacturing innovation can be harvested ultimately only by application providers or by Google?

Examining wireless innovation outside the context of other competitive broadband technologies is not technology-neutral, a cardinal and hard-won principle of appropriate regulation in the digital economy (and one of the few areas where the term "neutrality" actually means what it implies). One of the surest ways to undermine innovation is for government to stand on the competitive scales to favor one technology over another, which serves to lessen free-wheeling competition and innovation and reward rent-seeking and investing in politics.

Having the federal government investigate whether the free market in wireless needs government help to be more competitive is akin to the government asking fish if they need help learning to swim.

Wireless broadband is among the most cost-effective and fastest methods to bring broadband access to those Americans who don't yet have it. Having the federal government investigate whether the current, incredibly vibrant, free market in wireless needs government help to be more competitive is akin to the government asking fish if they need help learning to swim.

The idea that slow-moving government regulation could be the enabling source of fast-paced market innovation defies both common sense and the vast evidence of the past 15 years of fierce wireless competition in the marketplace. Wireless regulation is an unnecessary and counter-productive distraction from the primary, unifying goal of promoting universal broadband access for all Americans.

7. How Net Neutrality Could Ruin the Internet

Neutralists, as noted earlier, have been clever in their use of language. They are for a "free" and "open" Internet, one that is "fair" and does not "discriminate" against either the producers or

consumers of online content. And the catch-all phrase for that philosophy is net neutrality. Trying to rally the public against “neutrality” is akin to convincing the world that famously neutral Switzerland is a global menace.

A. What the Market Approach Has Built

The advocates of network neutrality are making their case at a time when private investment, competition, and innovation are dramatically expanding access to the Internet. Ironically, the declining costs of digital technology, along with the social/political potential of social networking on Web 2.0 and peer-to-peer (P2P) applications, have done much to spawn and sustain the network neutrality movement.

The rapid increase in the number of transistors that can be placed inexpensively on an integrated circuit has led to a steady decline in the incremental cost of digital production, storage, and distribution of data.⁵²

An iPhone with 8 GB of data storage capacity costs about \$200. Storing that much data in 1992 cost \$1 million.

In 1989, a consumer could purchase a Tandy 500 Professional System home computer with a 20 MHz processor and 2 MB of RAM – advertised in newspapers as “the most powerful computer ever” – for \$8,499, or about \$15,000 in 2009 dollars.⁵³ Today, a consumer can buy a computer a thousand times faster, with a thousand times more memory, for less than \$500.

In 1992, storing 1 terabyte worth of data cost \$5 million. Today, storing the same amount of information costs about \$110, and advances in technology will drop that cost to a penny by 2018.⁵⁴ To put that in terms consumers readily understand, an iPhone with 8 GB of data storage capacity costs about \$200. Storing that much data in 1992 cost \$1 million.⁵⁵

Total Internet traffic in the United States has risen from a little more than 1,000 terabytes per month in 1996 to more than 1 million terabytes per month in 2008, and it continues to climb.⁵⁶ Meanwhile, the cost of accessing the Internet and storing data online has fallen just as dramatically. These enormous leaps in technology and user-friendly end-to-end design of Internet Protocol (IP) were created by market competition and made possible by billions of dollars in private investments.

⁵² Bret Swanson, "Bandwidth Boom: Technology and Public Policy in the Exaflood Era," presentation to ALEC Annual Meeting, July 16, 2009.

⁵³ Ibid.

⁵⁴ Ibid.

⁵⁵ Ibid.

⁵⁶ Ibid.

B. Network Neutrality Means Less, Not More, Freedom

While the term “neutrality” connotes passivity, what the neutralists actually desire is a more activist government imposing more control over the Internet – substituting the decisions of a handful of bureaucrats for the voluntary choices of millions of individual consumers and businesses.

The problem with the way the Internet has grown up, say the neutralists, is that private-sector ISPs – “gatekeepers” in neutralist parlance – have come to wield too much power. A user must purchase a broadband contract with a cable, DSL, or fiber-optic provider. And then the customer is held captive to that company – which relishes the opportunity to “throttle” the broadband speed of its customers, cut off access to certain sites, charge extra for premium service, and take other steps that violate the “freedom” of Americans surfing the Web. Only a net neutrality law, which would prohibit ISPs from managing the traffic on their networks as they see fit, can prevent this parade of horrors.⁵⁷

The crippling flaw in this neutralist argument is that the vast majority of consumers don’t experience any of these supposed sins against their Internet freedom, and never will. When ISPs have imposed unacceptable bandwidth caps (or even contemplated doing so), consumers balked and the companies backed down. In other words, the market issued a swift correction.

Similarly, if an ISP wants to try charging extra to visit certain Web sites or block access to certain sites, it should be free to do so. Adopting such practices would result in millions of customers dumping that ISP for one that allows more freedom. In this way, the market provides an incentive to give users the best Web experience their money can buy.

We are far beyond the point where our wants and needs can be determined and solved by some central planner using an optimization routine.

Neutralists characterize network neutrality as a way to optimize the social value of the Internet, given the present state of technology, but this entirely misses the point.⁵⁸ The economic problem is not how to best use society’s scarce resources to meet our material wants and needs, which is

essentially an engineering problem, but rather how to discover what consumers want and the best ways to deliver it. We are far beyond the point where our wants and needs can be determined and solved by some central planner using an optimization routine. We are discovering new wants and needs at a torrid pace. The scarce resources available to meet those wants and needs also cannot be defined, since new discoveries, inventions, and innovations are constantly expanding available resources.

While abstract reasoning is useful for exploring the implications of the kind of dynamic path we

⁵⁷ See S. Derek Turner, “Digital Deja Vu: Old Myths in the Network Neutrality Debate,” Free Press, October 2009, for the latest recital of this position.

⁵⁸ The following ideas were suggested by Clifford Thies in his comments on an early draft of this paper. The author expresses his thanks.

are on, it is not very useful for industrial planning. We need to be continually re-optimizing in real time, taking into account the cost of change while in the midst of implementing multiple and competing plans. Managers today need to be entrepreneurs in the sense of agents of change and not merely in being the first to find the low-hanging fruit.

The post-scarcity neutralists comprehend that we are, to some extent, past an older paradigm of economics. But they don't understand that the new paradigm involves a new definition of cost and choice, choice not only of how to best achieve a pre-defined set of goals with a pre-defined set of means, but choice of goals given expanding means. This new economic reality further restricts government's ability – already seriously in doubt -- to intervene and “fix” market imperfections to improve outcomes. Old tactics such as picking winners and forcing big firms to subsidize their competitors were unsuccessful even before the digital era. They are obviously unworkable and counterproductive in the new era.⁵⁹

Network neutrality, as it is framed and proposed by the neutralists, would mean less, not more, freedom for consumers, businesses, and entrepreneurs. The vast growth of broadband services in recent years has not created a huge pie that a few intellectual visionaries can now slice up and serve, for free, to a grateful public. The investments and technological breakthroughs that made the digital era possible were the result of risk-taking in an environment defined by private property rights and the freedom to innovate. If the products of that market process are separated from the property rights and freedom to innovate that made them possible, they soon would no longer be produced, the “pie” would shrink, and we would all be less happy and less free.

C. Infrastructure Socialism

Clyde Wayne Crews, vice president for policy and director of technology studies at the free-market Competitive Enterprise Institute, identified what the neutralists want in 2008: “Welcome to infrastructure socialism, 21st century style.”⁶⁰

Neutralists imagine that the Internet started as a neutral paradise, and that the strong regulatory hand of government could return us to this collectivist utopia.

Neutralists, being true to their Marxist philosophy, imagine that the Internet started as a neutral paradise unspoiled by greedy ISPs, Big Media, and Big Software, and that the strong regulatory hand of government could return us to this collectivist utopia. But as Steven Titch notes, there is no going backwards:

If there was ever a time where everything about the Internet was neutral, it was the early university years when all communication and commands were text-based. That changed when the first browsers were introduced – graphical

⁵⁹ See David B. Kopel, *Antitrust after Microsoft: The Obsolescence of Antitrust in the Digital Era* (Chicago, IL: The Heartland Institute, 2001).

⁶⁰ Clyde Wayne Crews, "Dumb Pipes, a Dumb Idea: Net Neutrality as 21st Century Socialism," Competitive Enterprise Institute, April 2, 2008.

user interfaces brought an end to nominal Internet neutrality because they allowed information to be presented in a whole new way. That was good! They were groundbreaking tools that improved the Internet experience. Since then, entrepreneurship – what neutrality proponents pejoratively call “deep pockets” – has been giving users and Web hosts more and more tools that help them gain an advantage over others in delivering and presenting Internet- and Web-based information.⁶¹

“The Internet that network neutrality laws want to ‘preserve’ no longer exists,” Titch says. “Google and its competitors are just the latest companies to have fundamentally changed it.”⁶² The innovations that transformed the Internet from an email system for academics into a major means of communication, learning, and entertainment for billions of people around the world were made possible by privately invested capital attracted by promises of a positive return on investment. This transformation would have been impossible under the socialist, state-controlled dream of the neutralists.

Imposing net neutrality by force of law will dry up investment and forestall the next advances in technology.

Neutralists insist the adoption of proprietary, exclusionary business models must be outlawed. But letting bureaucrats move in now to micromanage what free-market capitalism has created makes little sense. Crews writes:

Elevating the principle of mandatory net neutrality above the principle of investor ownership and wealth creation in pipes and spectrum deflects market forces away from the infrastructure development that we need. And we do need it: recent news notes potential bottlenecks on the Internet caused, not by anyone’s blockage, but by escalating data and video. Growing hand-in-hand in response to market demand, private infrastructure companies can handle any traffic growth at all; with neutrality, it’s in no one’s interest to take the risk or bother.⁶³

Neutralists don’t care much for this argument – since, as noted earlier, they view broadband as something that would be in unlimited supply if not for greedy capitalist telephone and cable companies. They ignore the technological gains we’ve all experienced thanks to private-sector investment, and see only imaginary sins against the public. But imposing net neutrality by force of law will dry up investment and forestall the next advances in technology. Titch writes:

Network neutrality is akin to a “regulatory taking” in that it prohibits the owners of “last-mile” networks from realizing the full value of their property. Unlike narrowband networks, carriers can employ [quality of service] techniques in their

⁶¹ Steven Titch, “The Internet Is Not Neutral (and No Law Can Make It So),” *Policy Study #375*, Reason Foundation, May 2009.

⁶² *Ibid.*

⁶³ Crews, *supra* note 60.

broadband networks. Network neutrality prohibits service providers from using these techniques to create a separate revenue stream. From the start, return on investment is diminished.⁶⁴

An Internet and wireless industry forced to dance to the ever-changing tunes of government bureaucrats would be less vibrant, less innovative, and less free for everyone who plugs in.

8. Conclusion

Network neutrality enjoys broad support among the businesses that have a stake in the growth and success of the Internet. What is controversial is whether the principles of network neutrality should be turned into regulations that would prohibit activities, such as tiered pricing and “throttling” heavy users of bandwidth, that some ISPs have expressed interest in using. Some advocates of these regulations are oblivious to the philosophy that lies beneath their position.

This study shows how the philosophy of the neutralists is deeply at odds with the existing market-based model of Internet investment and management. From the founding of the “copyleft” movement, to the publication of *The dotCommunist Manifesto*, to modern attempts to foist net neutrality upon the Web and wireless technology, the neutralists have made their aims clear. “Big Business” must be brought to its knees – all the better to pray for mercy (or at least permission to operate) from government bureaucrats who will replace the free market in deciding how broadband networks are run and how content will flow.

Neutralists cynically promote the false notion that broadband providers should be regulated provided like public utilities. Yet access to the Internet is not similar to electricity, water, or natural gas. Internet access and technology is a complicated service delivered by competing private companies that have spent hundreds of billions of dollars bringing ever-faster broadband and wireless innovation to consumers. Upsetting this market-based model of service will lead to less innovation, slower broadband build-out, and a poorer technological experience for all.

The market, not government, brought the Internet to the palm of our hands, and the government, not the market, has slowed the spread of wireless communications services by its mismanagement of the spectrum.

Neutralists view the wireless sector as virgin territory in which to advance their goals. But the wireless sector is even more competitive than the land-based ISP marketplace, and innovation is occurring there at a torrid pace. The market, not government, brought the Internet to the palm of our hands, and the government, not the market, has slowed the spread of wireless communications services by its mismanagement of the spectrum.

Neutralists have cleverly exploited the language of freedom to advance their goals – calling for a

⁶⁴ Titch, supra note 61.

“free” and “open” Internet, and declaring the market guilty of “discrimination” and “unfair practices.” But the Internet is already “open” and “free” in the sense that the technology sector is open to the next competitor to produce the next groundbreaking innovation, and individuals are free to accept or reject it. Not all discrimination is bad, and the market is well-equipped to swiftly punish any unfair practices.

About the Author

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The author thanks Scott Cleland for permission to use his white paper on “neutrality” as a springboard for this policy study. Cleland is founder and president of Precursor® LLC, an industry research and consulting firm specializing in the techcom sector, whose mission is to help companies anticipate change for competitive advantage. He is also chairman of Netcompetition.org, an e-forum on Net Neutrality funded by broadband telecom, cable, and wireless companies.

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