Office for Information Technology Policy Brief

A Library Perspective on Network Neutrality

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"It's better and more efficient for us all if we have a separate market where we get our connectivity, and a separate market where we get our content. Information is what I use to make all my decisions. Not just what to buy, but how to vote." --Tim Berners-Lee, inventor of the World Wide Web[1]

"Now what they would like to do is use my pipes free, but I ain't going to let them do that because we have spent this capital and we have to have a return on it. So there's going to have to be some mechanism for these people who use these pipes to pay for the portion they're using. Why should they be allowed to use my pipes? The Internet can't be free in that sense, because we and the cable companies have made an investment and for a Google or Yahoo! or Vonage or anybody to expect to use these pipes [for] free is nuts!" --Ed Whitacre, chairman of SBC[2]

Introduction

Congress, as part of its recent efforts to reform telecommunications law, has been considering various forms of "net neutrality" legislation. Some label such efforts as misguided attempts to regulate the Internet -- attempts that would undermine what they take to be a robust free market in Internet products and services. Others argue that net neutrality currently exists and is the only thing preventing big companies (both telecommunications companies and content companies) from reducing the democratic, distributed Internet of today into little more than a new form of cable TV for tomorrow.

We at the American Library Association believe that both sides of this debate have expressed valid concerns. On the one hand, it is critical for the growth of the Internet that a robust, competitive market for Internet carriage and services be encouraged, with regulation kept at a minimum. At the same time, we hold that net neutrality -- properly understood -- is a fundamental principle of the Internet that has permitted it to become a critical information and communication resource for libraries, their missions, and their patrons. Our goal here is to outline what we believe to be the core goals that net neutrality regulation must meet, with the proviso that meeting those goals must be done in ways that encourage as free a market as possible for carriers and investors in Internet infrastructure.

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[1] See "Berners-Lee Calls for Net neutrality," CNET News, May 23, 2006. Accessible at <http://news.com.com/2100-1036_3-6075472.html>.

[2] See "At SBC, It's All About 'Scale and Scope'," Business Week Online, Nov. 7, 2005. Accessible at <http://www.businessweek.com/magazine/content/05_45/b3958092.htm>.

What is Net Neutrality?

Net Neutrality (also often called network neutrality) is at its heart a concept of online non-discrimination. It is the principle that consumers/citizens should be free to get access to -- or to provide -- the Internet content and services they wish, and that consumer access should not be regulated based on the source of that content or service, or, to the extent possible, on the basis of the kind of service being provided. Information providers -- which may be websites, online services, et cetera, and who may be affiliated with traditional commercial enterprises but who also may be individual citizens, libraries, schools, or nonprofit entities -- should have essentially the same quality of access to distribute their offerings. "Pipe" owners (carriers) should not be allowed to charge the same kinds of information providers more money for the same pipes, or establish exclusive deals that relegate everyone else (including small noncommercial or startup entities) to an Internet "slow lane." This principle should hold true even when a broadband provider is providing Internet carriage to a competitor.[3]

Why is Net Neutrality An Issue Now?

Net neutrality, although it was not known by this name at the time, was a founding principle of the Internet. It is a principle incorporating both the "common carrier" laws that have long governed the phone lines used for both voice telephony and dial up access. Now, many consumers receive broadband service over other technologies (cable, DSL) that are not subject to the same common-carriage requirements. While these technologies are unquestionably superior to dial-up, the lack of enforceable net-neutrality principles concerns us. Some cable and DSL companies have suggested they are planning to engage in "bit discrimination" by providing faster connections to websites and services that pay a premium, or by preferring their own business partners when delivering content. As the Internet moves forward, is it really wise to leave net neutrality behind?

Why Net Neutrality Matters to Libraries

The American Library Association is a strong advocate for intellectual freedom, which is the "right of all peoples to seek and receive information from all points of view without restriction."[4] Intellectual freedom is critical to our democracy, because democracy relies on an informed citizenry. The Internet connects people of diverse geographical, political, or ideological origins, greatly enhancing everyone's ability to share and to inform both themselves and others.

Our libraries' longstanding commitment to freedom of expression in the realm of content is well-known; in the context of the net neutrality debate, however, we

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[3] Senator Ron Wyden argued in a letter to the Wall Street Journal: "Cox Communications, a broadband provider that also has a large classified advertising business, is currently blocking access to craigslist.org, a large, free classified Web site that competes with Cox." Sen. Wyden's characterization of the problem between Cox and craigslist was later disproved (the blocking seems to have been a result of a technical problem rather than of a policy choice by Cox or anyone else), but his letter underscores the prospect that a carrier could choose to differentially favor or disfavor particular content providers.

[4] American Library Association, "Intellectual Freedom and Censorship Q&A" avail. at http://www.ala.org/ala/oif/basics/intellectual.htm

believe it is equally important to stress that the freedom of libraries and librarians to provide innovative new kinds of information services will be central to the growth and development of our democratic culture. A world in which librarians and other noncommercial enterprises are of necessity limited to the Internet's slow lanes while (for example) commercial high-definition movies can obtain preferential treatment seems to us to be overlooking a central priority for a democratic society -- the necessity of enabling educators, librarians, and, in fact, all citizens to inform themselves and each other just as much as the major commercial and media interests can inform them.

The ability of the Internet to spread and share ideas is only getting better. With modern technology, individuals and small groups can produce rich audio and video resources whose production used to be the exclusive domain of large companies. We must work to ensure that these resources are not relegated to second-class delivery on the Internet -- or else the intellectual freedoms fostered by the Internet will be constrained.

To get an idea of the kinds of services libraries and librarians will want to offer over the full Internet, consider one application that libraries are already especially invested in -- distance learning. Classes offered using audio and video streamed over the Internet have huge potential to bring expert teachers into the homes of students around the globe.

Regulation vs. Competition?

Some of the pipe owners argue that net neutrality is unnecessary regulation that will stifle competition and slow deployment of broadband technologies. But the truth is there is already only a little competition between broadband providers, and there is no evidence that there ever will be much. In most parts of the U.S., there are at most two companies that provide a broadband pipe to your home: a telephone company and a cable company. Both of these industries are already partly regulated because they are widely perceived as natural monopolies: once a cable is laid to your house, there really is no rational, non-wasteful reason to lay another cable to your house, since you only need one at a time; therefore, most communities only allow one cable or telephone company to provide service to an area, and then regulate that company so to prevent abuse of the state-granted monopoly. Thus, we don't allow phone companies to charge exorbitant amounts for local service; nor do we normally permit a cable company to avoid providing service to poor neighborhoods.

Contrast the quasi-monopoly on broadband pipes with the intensely competitive market of web content and services. There are millions of websites available now, originating from all over the world, and countless hours of video and audio, all competing for your time, and sometimes your money.

With the advent of broadband connections, the telecom and cable companies have found a new way to exploit their state-granted monopoly: leverage it into a market advantage in Internet access. This has the potential to harm competition in the

dynamic, innovative content and services industry without solving the lack of real competition in the broadband access market.

In contrast, net neutrality -- built into our telecommunications regulatory framework -- will encourage competition in online content and services to stay strong. By keeping broadband providers from raising artificial price barriers to competition, net neutrality will preserve the egalitarian bit-neutral principles that have made the Internet the most competitive market in history.

Broadband Buildout Issues

The American Library Association is a strong supporter of efforts to increase the capacity and coverage of broadband Internet service in the United States. We recognize that the companies who invest in modernizing our access to the Internet on the cutting edge must have financial incentives to do so. But it is important that the new business models for broadband preserve the principles that have made the Internet successful. Online content and service providers already pay millions in bandwidth costs, and as their bandwidth needs increase, they can only expect those costs to rise.[5]

Permitting the pipe owners to subsidize their investments by entering discriminatory arrangements with well-heeled online content providers will not benefit consumers -- the costs will still ultimately be paid by consumers. And it won't hurt powerful online incumbents who can afford to pay-to-play. What it will do is raise barriers for the next eBay or YouTube -- or the next online library, Gutenberg Project, or nonprofit distance-learning service. Net neutrality is the best way to ensure that when consumers get broadband access to the Internet, there are still services and content worth accessing that need not spring from or be funded by a small set of commercial interests.

Shouldn't Those Services That Use More Internet Bandwidth Pay More?

In a nutshell, ALA's answer is this: "Of course they should pay more for using more bandwidth." It is critical to understand this important point -- *our belief in the need for strong net neutrality does not translate into an opposition to traditional tiered pricing.*

To understand this distinction, it may be helpful to consider an exchange between Amazon.com's Paul Misener and telecommunications advocate Mike McCurry that took place at a debate at George Washington University on Friday, June 16. In response to a question, Misener noted out that Amazon and other large bandwidth users already pay for their use of bandwidth.

 "It's not true that Internet content companies don't pay for access to the Internet."

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[5] It is here that we note in passing that SBC CEO Whitacre's comments about using his companies "pipes" for "free" are misleading. Carriers are already paid for their services not only by individual broadband subscribers but also by large Internet content providers such as Yahoo! and Google, which pay millions of dollars to obtain adequate broadband access to their Internet audiences. See also Paul Misener's comments in this section.

Misener said. "We pay handsomely for access to the Internet. Amazon pays millions of dollars a year to connect to the Internet…There are a lot of ways that companies at the edge providing content are already paying the network operators."

McCurry responded with this question: "Paul, isn't that exactly the kind of tiered pricing that everyone who proposes net neutrality rails against?"

"No," Misener said, adding that "*Tiered pricing for access is something we support* [Emphasis ours]. Amazon pays a lot more than 'Joe's-Internet-retail.com' simply because we use more capacity… That makes perfect sense to us. You pay for that capacity. *But the important component here is that once the consumer has paid for his or her capacity at their home they ought to be able to use that capacity however they want* [Emphasis ours]. There's a fundamental misconception here that somehow delivery of video over the Internet is just like it is over cable TV, over satellite, over broadcast or, frankly, like delivery of content through newspapers or magazines. Those models have always been about 'push.' Somebody decides -- who either owns the pipe or owns the newspaper -- what content goes in their and pushes it out to consumers and they can choose to read it or not."

We take Misener's distinction here to be crucial. The immense growth of the Internet, both commercially and noncommercially -- together with its expansion of democratic and educational possibilities, from distance learning to blogs -- has been tied to the understanding that anybody can pay for bandwidth and, once he or she has bought it, can use the bandwidth in any lawful manner, and that carriers cannot and should discriminate among lawful users of the Internet. This understanding is one that accommodates tiered pricing -- including the recognition that carriers need to be able to make a profit and to reinvest in their infrastructure -- and that recognizes that a truly free market is one in which the little guy gets access to the same city streets, phone lines, transport services, and so on that large commercial enterprises have access to.

A Thought Experiment: Taxicabs in New York City

Anyone who has frequently used taxicabs in New York City is aware that there are some kinds of tiered pricing in some of these services. For example, fares during peak commuting hours may be higher, and there may be particular charges associated with using toll bridges and tunnels. But one can imagine what riding in taxicabs might be like if taxicab operators had freedom to discriminate based on where a passenger was going or what he or she planned to do after getting there. Taxicab companies might be tempted under such a circumstances to cut special deals -- to provide better rates and/or service to someone traveling to Radio City Music Hall rather than to the Museum of Modern Art simply because the former had a commercial partnership with the taxicab company.

In this thought experiment, it is certain that a rational market in taxicab services would arise, but it is unclear that it would be market that would serve the public's needs as well as the (somewhat) more regulated market that exists does. Nor is it

clear that one could always point to competition in this market -- other taxicab companies, the subway system, livery drivers -- as a fix for any distortions this kind of deal-making might result in. After all, those competitors might well be tempted to cut the same deals.

Is Current Law Enough?

The FCC has some ability to moderate discriminatory behavior by telephone and cable companies, and antitrust law may in theory prohibit the kind of anticompetitive behavior discussed above. However, in order to *prevent* bad behavior rather than only *react* to it, we believe a more positive embodiment of the net neutrality principle in law and regulation is needed.

Antitrust suits would be a particularly poor approach to enforcing net neutrality, as such cases are notorious for draining the injured party of resources due to their long duration and high litigation costs. In addition, the final remedy, if any, cannot really heal the harm to the market in fast-moving technology-based industries. By the time the verdict is rendered, the world has moved on.

What Should Net Neutrality Regulation Look Like?

The American Library Association does not take a position on what the specifics of any net neutrality regulation should be, except to say, as we suggest above, that relying solely on anti-trust regulation probably will not be adequate to establish or preserve net neutrality. We do offer, however, the following two suggestions as guiding principles for the design of any network neutrality regulation:

(1) Set the rates, and charge access, at the "on-ramps." The principle here is simple: allow users, whether individual users or content providers, to buy bandwidth (in various quantities) that allows them to get the desired degree of access to the Internet and its other users. Once that is done, the carrier should avoid discrimination among Internet uses and users to the extent possible. This kind of nondiscrimination does allow carriers to charge more for higher uses of bandwidth, but it would discourage them from "picking winners" among Internet users and Internet applications.

2) Regulate to encourage the Berners-Lee "ratchet" principle. World Wide Web creator Tim Berners-Lee has articulated a relatively simple goal aimed at clarifying the debate about net neutrality. On his blog[6] Berners-Lee writes: "Net neutrality is this: *If I pay to connect to the Net with a certain quality of service, and you pay to connect with that or greater quality of service, then we can communicate at that level.*" Berners-Lee makes a point of distinguishing this principle from other popular but misconceived notions of network neutrality: "Net Neutrality is NOT asking for the internet for free…Net Neutrality is NOT saying that one shouldn't pay more money for high quality of service. We always have, and we always will." The best way to reach this result, Berners-Lee argues, is to create a regulatory framework under which it is "up to the ISPs [Internet Service Providers and carriers] to make sure

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[6] *See* http://dig.csail.mit.edu/breadcrumbs/blog/4, entry dated 2006-21-06 (June 21, 2006).

they interoperate so that that happens."

Berners-Lee acknowledges that he is calling for regulation, and that a great degree of Internet growth has been based on the relative absence of regulation. In his view, however, a basic level of net-neutrality regulation is a prerequisite for the growth and development of an otherwise largely unregulated Internet. Says Berners-Lee: "Yes, regulation to keep the Internet open is regulation. And mostly, the Internet thrives on lack of regulation. But some basic values have to be preserved. For example, the market system depends on the rule that you can't photocopy money. Democracy depends on freedom of speech. Freedom of connection, with any application, to any party, is the fundamental social basis of the Internet, and, now, the society based on it…I hope that Congress can protect net neutrality, so I can continue to innovate in the internet space. I want to see the explosion of innovations happening out there on the Web, so diverse and so exciting, continue unabated."

Similarly, ALA believes that a basic level of net neutrality regulation, aimed at allowing carriers to get a fair and adequate return for their expansion and maintenance while denying carriers the opportunity to leverage their natural monopolies to pick content and service "winners and losers," is the right choice as our government policy.

Conclusion

The American Library Association supports minimalist net neutrality legislation and regulation that preserves the competitive online markets for content and services. Bandwidth and access should be offered on equal terms to all willing to pay. Otherwise, broadband providers will be free to leverage their quasi-monopolies into lucrative but market-distorting agreements. The vitality of voices on the Internet is critical to the intellectual freedom that libraries around the world are trying to protect and promote. Laws that preserve net neutrality are the best way to preserve a vibrant diversity of viewpoints into the foreseeable future.

About The ALA

The American Library Association is the oldest and largest library association in the world, with more than 64,000 members. Its mission is to promote the highest quality library and information services and public access to information.