NET NEUTRALITY? THERE'S NOTHING NEUTRAL ABOUT IT

By Aaron Weiss

One thing is clear: The erosion of Net Neutrality principles will destroy the Internet as we know it… or, depending on your perspective, the *enforcement* of Net Neutrality principles will destroy the Internet as we know it. Pick your poison? The long-simmering debate over what role network operators including the Bell and cable companies should or should not play in squeezing their bandwidth for profit is quickly raging into a full-on boil.

Illustration by Tomasz Walenta

Should Verizon's business alliances allow them to treat traffic to and from Yahoo preferentially over that destined for Google? Should AOL be able to guarantee email delivery to its members only from senders who pay a fee? The emerging political landscape in the US Congress seems to suggest "yes."

So driven by concern for the welfare of net neutrality in the face of recent US political actions, activists from interest groups as disparate as the American Library Association and the Gun Owners of America are actually fighting on the same side. Yet, politicians sponsoring new communications bills—many Republicans and a few Democrats—and the telecoms cheering them on, say the fervor is much ado about nothing. In fact, they say, transforming network neutrality principles into legal regulations would be counterproductive and put the Internet at risk. It seems all that anyone can agree on here is that no one is very neutral at all.

Network Neutrality Defined?

Network neutrality is a principle that says those who operate networks which provide an overall benefit to the public good and rely on public property should not use their ownership to confer discriminatory treatment among their customers.

Suppose you built a private toll highway and it is the only route from point A to point B available for most drivers without off-road vehicles. It is your right to set a toll rate for access to the road, which net neutrality advocates define—perhaps vaguely—as "fair and reasonable." It is even your right to charge different rates for different lanes. For example, you could charge a premium to drive in the high-speed lane, which is wider, better maintained, and posts higher speed limits. This, one might say, is how the US broadband network is currently structured.

Now suppose Lexus signs a deal with you, the highway owner. In exchange for a fee from Lexus, you allow only Lexus cars in the fastest lane. Neither Hyundais nor BMWs can access the fastest lane at any price. You are now discriminating among your customers, because they do not all have equal access to the service at an open rate. The net neutrality principle is violated. This, net neutrality advocates argue, is what the US telecoms and cable operators want—and what politicians are paving the way for.

Supporters of the telecoms argue that the term "network neutrality" is overly broad and indefinable. What if, on your toll highway, a new kind of car becomes popular, one which belches smoke and stalls frequently, blocking traffic and reducing the utility of the highway for everyone? Or, to use a more malicious example, a new car features built-in weaponry and its drivers take pot shots at everyone else. Neither is hypothetical—viruses, spam, bandwidth-draining applications, and network attacks which compromise service all proliferate on the Internet.

Does network neutrality and its non-discriminatory policy prevent you, the highway owner, from banning this kind of harmful traffic? Even if customers creating the problems pay the same rates open to all? And if we agree that you can ban harmful traffic, critics of network neutrality argue, aren't neutrality advocates really saying "you can't discriminate except when you can?" Isn't that itself discriminatory? How do you define both cases and who gets to decide?

"Who gets to decide" adds a second dimension to the debate. Some on each side actually agree that, on balance and in principle, network neutrality is good "but for special cases." But one school of thought says that market forces can and should decide how the bounds are drawn. Another view counters that broadband does not and cannot enjoy a true marketplace—natural

monopolies inevitably limit customer choice—and so the state should decide.

Common Carriage—Hands Off Your Network

Why should you, owner of the toll highway, be required not to offer discriminatory services at all? Why does network neutrality apply? Beside the fact that the highway serves a necessary "public good," perhaps more important is the fact that it does so by leveraging public property. You may own the toll highway, but you don't own the mountains it passes through or the rivers you've bridged across. These make up the "public right of way," access to which allows your business to exist.

The intersection between private business and public rights has roots well before the Internet—as far back as ancient Rome, at least. In somewhat more modern times, the US codified the concept known as "common carriage" in the Communications Act of 1934. The burgeoning telephone network emerged as a public utility—owned by private business but built across public land. The Act put a form of network neutrality into place—you pay the phone company's rates (which themselves were subject to some regulation) and they route your calls. As a neutral network operator, the phone company cannot meddle in the content or nature of your calls. They cannot, for example, guarantee calls will only go through to companies who pay a premium fee and leave the network "hit or miss" for everyone else.

Common carriers, because they are essentially granted an infrastructural monopoly in their service area, are also required to share their network with competitors. Of course, they can charge competitors a fee for access to the infrastructure, but the fee must not be so far above market rates as to be an attempt by the network owner to lock out competition.

The emergence of the Internet has shifted the ground in many areas from social interaction to political activism to the tradition of common carriage. The first two technologies to popularize high-speed broadband Internet access were DSL and cable, and, in fact, these are what most subscribers still use today. Unlike telephone companies, cable operators have never been classified as common carriers by the FCC. Of course, cable companies did not exist when the 1934 Communications Act was passed, and when they did emerge, were classified by the FCC as "information providers" rather than "communications providers." Only communication carriers are governed by common carriage regulations. And for most of its existence, cable was only good for watching TV. Before broadband Internet, you couldn't use cable lines to exchange information with anyone.

DSL, on the other hand, travels over the old-fashioned telephone system. Its operators, the Bell companies, are bound by common carriage rules. The Bells have complained for years since the broadband boom that the system is unfair. In the digital age, there is no longer any distinction between communications and information. Streaming video and email and VoIP all boil down to the same thing—bits are bits. Cable operators now offer basically the same services as the Bells, yet are not required to share their own networks with competitors nor adhere to other rules of common carriage.

More or Less Government?

Many would agree that the common carriage system as codified has become unfair. The technological landscape has shifted. Even the more recent 1996 Telecommunications Act failed to fully recognize the broadband boom. How do we now create an even playing field which benefits both the private network operators as well as con-

sumers, and where does network neutrality fit in?

One more question: How do you feel about government? Does it cause more problems than it solves or vice versa? Differing political philosophies frame much of this debate. Many, but not all, supporters behind the current net neutrality activism argue that the government should extend common carrier rules more widely. This, they say, would enshrine important network neutrality principles into regulations that apply evenly across providers. But recent Congressional bills framing the new communications landscape do not include much wording about net neutrality at all. To advocates, these are missed opportunities and wink-wink-nods to the telecoms which could shape the future of the Internet.

Critics, and those advocating the current bills before Congress, say no—common carriage rules should be weakened even more. DSL should become more like cable, not less. Indeed, the FCC has already indicated its inclination to reclassify DSL as an information rather than communications system. More regulations, critics say, would only slow investment and innovation and encourage the status quo.

Meanwhile, the largest telecoms, like Verizon, have begun to build around the common carriage constraint. Their answer is fiber. Because common carrier regulations apply only to the old and technologically-limited copper-based phone network, Verizon is building a new fiber optic network. Not only is it capable of offering bandwidth pipes much fatter than DSL and potentially cable, Verizon does not have to share their fiber with anyone. Nor adhere to network neutrality. In fact, Verizon has indicated they may allot up to 80 percent of their new bandwidth to their own subscription video offerings. Deploying a fiber network is an expensive proposition—Verizon has spent over $2 billion to date on fiber and it serves only a fraction of its customers. Completing their fiber network will cost billions more and take many years to complete. This, say Verizon and advocates behind telecoms with similar plans, is why they deserve the spoils of their efforts.

To some extent, critics of enforced network neutrality laws have been able to hoist activists on their own petard. After all, many proponents of common carriage laws are from the same side of the political spectrum viciously criticizing US government response to many other issues of the day, from medicare to defense to Hurricane Katrina preparation and recovery. “This is the government you want more involved in regulating the Internet?” they argue.

At a meeting of minds at the University of Southern California’s Annenberg Center for Communication in February 2006, a symposium brought together advocates from business, activism, and politics to find common ground on network regulation. The resulting Annenberg Center Principles for Network Neutrality lists five facets of reasonably mutual agreement among the various parties: Everyone should win, government regulation should be light and focused on the outer edges of the problem, minimum standards for broadband service should be required, customers should receive clear policies, and the government should encourage competition and innovation (but enforced network sharing is not specifically stated).

On the one hand, the symposium and others like it build bridges and dialogue between varied interests who otherwise attack one another from behind the protective walls of the media. On the other, does its outcome make network neutrality any less of a slippery subject than it was before? Principles and implementation are very different things, and the debate is in some ways as much about the former as the latter.

Ghosts in the Room?

Both FCC Chairman Kevin Martin and Texas House Republican Joe Barton, sponsor of the most controversial "Communications Opportunity, Promotion, and Enhancement Act of 2006" bill which may erode network neutrality, have argued publicly that there's little cause for alarm. They point out that neutrality abuses have so far been minimal. Besides, they say, the FCC already has tools available to crackdown on anti-competitive practices, without needing a whole new regulatory framework explicitly enforcing net neutrality.

One oft-cited case involves a 2005 incident with Madison River Communications, a North Carolina-based broadband provider. The popular VoIP provider Vonage filed an FCC complaint against Madison River accusing it of blocking Vonage service from their network—the very anti-competitive scenario that network neutrality advocates worry about, particularly with the rising number of network operators deploying their own VoIP services. The FCC decided in favor of Vonage. Madison River was required to stop blocking Vonage service and pay a $15,000 fine.

The case is a rallying point for both sides of the debate. On the one hand, neutrality activists argue, this is exactly the thing they're worried about. Without a clear framework in place, this will happen more often, and, in more technically subtle ways, the FCC will be unable to keep up, and the consumer experience will be compromised.

Telecom supporters, though, see the case as demonstrating that the FCC can handle the situation already. Why rush to impose new laws and regulations, they say, when the tools to attack abuse are available? That the Madison River case is one of only a handful like it in recent years is seen by some as evidence that neutrality abuses may occur at the margins of the industry, but can be handled without a rush to regulation.

While the FCC and Representative Barton are saying that neutrality violations aren't widespread enough to worry so much about, executives at the telecoms have made high-profile inflammatory statements giving neutrality advocates reason to fear otherwise.

In 2005, Ed Whitacre, CEO of then-SBC and now AT&T following their recent merger, made the widely-reported remark, "…for a Google or Yahoo or Vonage or anybody to expect to use these pipes [for] free is nuts!" This was followed shortly thereafter in early 2006 by Verizon executive John Thorne's also-widely-reported comment that Google is "….enjoying a free lunch that should, by any rational account, be the lunch of the facilities providers."

Both men were defending the notion that content providers like Google, Yahoo, Amazon, and so on, should pay the network operator for a level of service beyond that which is normally provided. In effect, because providers enjoy such profitable success thanks to the network, telecoms should share some of the spoils. Instead,

THE TELECOMS have deep pockets to advance their interests, but so do the content providers such as Google.

telco executives are saying, the content providers were freeloading on the network by paying the same rates as everyone else.

Both statements were bizarre, and fueled significantly passionate defense of net neutrality. Clearly customers already pay AT&T and Verizon every month for access to the Internet. And content providers like Google pay millions of dollars for their access to the Internet. Both ends of the pipe are paying for access already.

Unlevelling the Playing Field

It is difficult for the average person to access the television-viewing audience. Putting a network, or a show, on the air is considerably difficult and expensive. Buying advertising time, whether on TV, on radio, or in magazines and newspapers is costly enough to limit access to these audiences.

On the Internet, anyone can publish a Web site equally accessible to anyone else—around the world. We all know this. More than any preceding technology, the Internet has enabled free expression and all it entails to flourish. We already take it for granted although the Web isn't yet 15 years old. True, even on the Internet, large investments—in marketing and promotion, can draw more eyeballs. But it's also true that popular blogs and Web pages produced by non-privileged individuals often draw as much or more traffic as those with deep pockets.

But for network operators, treating all bits equally limits their business potential. The telecoms believe they may make more money by unlevelling the playing field. To recall the toll highway analogy, they want to sign that alliance with Lexus and build the Lexus-only lane. Or better yet, a lane for their own content, particularly video. Their argument, quite simply, is "don't pen us in." Regulations which enforce network neutrality would limit their business models and, they say, their incentive to create better, faster, more pervasive networks.

If email is the leading edge of the Internet, AOL's and Yahoo's recent announcements to adopt Goodmail struck fear into the heart of net neutrality proponents. Goodmail is a third-party email certification program. Basically, Goodmail allows email senders to buy, at a fraction of a penny per message, a stamp of approval that their email is not spam, phishing, or otherwise fraudulent—all problems which are pervasive and imperfectly managed today.

AOL and Yahoo—who combined host an estimated 40-plus million email addresses—will give Goodmail-certified messages the white glove treatment. They will not be subject to spam filters, will be rewarded delivery guarantees, and senders will have access to delivery confirmations. Some say Goodmail heralds the era of the "two-tiered" Internet, starting with email. Others disagree.

While Goodmail is the first widespread pay-per-mail discrimination applied to email, other forms of email discrimination have been used widely for years. Most providers now use extensive filters to recognize spam, block messages from "blacklisted" servers, and so on. It is not uncommon for legitimate senders to become casualties of these processes. Once again, the slippery principle "don't discriminate except when you do" frames the debate.

Net neutrality advocates say that tiered service will result in more harm than good. It may indeed more reliably block fraudulent messages. But it will also introduce a barrier-to-entry for the "little guy." Perhaps Goodmail won't impact person-to-person communications, but myriad free mailing lists bind Internet communities. Because all mailing lists now benefit from level access to a mass audience, Goodmail fees may

raise the barrier to entry.

Market forces could well play a role in judging Goodmail. There are hundreds if not thousands of email providers—some free, many cheap. Users who find Goodmail fees burdensome enough may switch providers and encourage their recipients to follow. Here the analogy to broadband networks breaks down. In most markets, broadband providers are scarce. Choosing from even two is a luxury many communities don't have.

Goliath v. Goliath

Unlevelling the playing field is said to threaten the democratic foundation of the Internet, but for content providers like Google and Yahoo, it threatens something else—their bottom lines. By seeking regulatory relief, and protection from future regulation from Washington, the telecoms have entered into a battle with two front lines.

For better or worse, consumers may be the weaker opponents. The net neutrality issue has not become a subject of much household discussion. While activists see a great deal at stake, most broadband customers are average citizens, focused on higher profile issues of the day—taxes, war, the rising price of fuel—than the political frameworks that underlie the Internet. In the first quarter of 2006, activists have succeeded at raising a good deal more awareness through organized drives based, of course, on the Internet. But how much this awareness translates into influence remains to be seen.

The content providers have cash at stake. Putting aside network neutrality principles, Google and Yahoo et al. simply don't wish to be cornered into a system which can extract from them premium payments. "Google is not discussing sharing of the costs of broadband networks with any carrier," says the company.

Verizon, with a market capitalization of about $100 billion, is the largest telecom in the US. Yet, riding high on shares worth over $400 apiece, Google's market cap has already surged well beyond the $100 billion mark. Microsoft, who along with Yahoo, Google, Amazon, and eBay is lobbying in favor of net neutrality, weighs in at over $250 billion alone. The telecoms have deep pockets to advance their interests, but so do the content providers.

Their leverage isn't only financial heft, either. The content providers have a strong case that it is their content, in fact, that draws many broadband providers' customers to subscribe in the first place. That's why they suggest the telecoms have it all backwards—Google isn't profiting off the back of the network operator, the network is profiting off the existence of Google.

The real fight over network neutrality isn't between the telecoms and their end users—it's with the major content providers, who now hold the largest bankrolls.

Like Grabbing Jello

With the current US Congress not in a regulating mood, the latest network neutrality power struggle may turn out to be less a battle of principles and more a case of big money being kept in check by even bigger money.

Should the big content providers ultimately leverage their own might to hold back the telecoms and preserve net neutrality, opponents of regulation will be able to claim justification after all, citing the evidence that the market corrected itself. Supporters of net neutrality will be argue that their principles were upheld and claim the high ground.

Meanwhile both sides will continue to be able to claim the other is still wrong. ~

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