
A Neutral Assessment of “Network Neutrality”: An Overview of an Emerging Legal Issue

*Peter V. Nguyen**

Introduction

This article provides a brief overview of some of the key issues related to what could be considered the next critical debate arising from the intersection of law and the Internet – “net neutrality.”¹ For those intimately involved in the discussion, the resolution of this issue may change the way the Internet operates as we know it today. While “net neutrality” has had arguably much greater exposure in the United States² Canada’s own policymakers have made certain pronouncements regarding “net neutrality” and any divergence between the legislative responses may have some significant consequences for Canadian users of the Internet. It is useful, therefore, to have an understanding of the key issues, parties and current legislative developments.

The basics

For the purposes of this article, net neutrality refers to the practice of access providers (e.g. internet service providers) treating all similar data traffic routed over the Internet “equally” and without discrimination.³ Therefore, in principle, when an Internet user conducts a search on Google or Yahoo! the results of such should be handled by the various Internet access providers without discrimination as to the source of the data. In other words, it should not matter whether the user conducts a search from Google or Yahoo! (or even some other lesser known search engine) – the results of the search should be displayed to the user in the same amount of time, other things being equal.⁴ In fact, this is how the Internet operates today, largely because of its technological underpinnings.⁵

However, as a result of both technological developments and the changing nature of content and data being transmitted over the Internet, there is now a debate as to whether or not this “equal” or “neutral” treatment of Internet data should continue. More specifically, the network neutrality debate revolves around the following issue: to what extent do “net neutrality” principles need to be enshrined in legislation or some other form of regulation?

Generally speaking, those in favour of ensuring that network neutrality principles remain intact are the Internet content providers – companies such as Google and Yahoo!, who rely on the content available on their websites to drive their business. On the other side of the fence are, among others, the Internet access providers – primarily telecommunications companies who have built the physical and technological infrastructure over which the content providers’ data is transmitted. This group opposes any legislated or regulated notion of network neutrality principles for a variety of reasons including a belief that increased regulation will limit the evolution of the Internet.

The debate

From a technology point of view, telecommunications equipment and infrastructure used to transmit Internet data has evolved so that different forms of data travelling over the Internet can now effectively be identified and ultimately treated differently.⁶ As such, this technological development has allowed Internet access providers to question the legitimacy of the network neutrality principles as they are now technologically able to discriminate against different forms of Internet data. Along with technological developments, the types of content and data being transmitted over the Internet are now also very different. Websites have evolved from simply displaying text and low resolution graphics to multimedia-rich websites full of high-resolution photos, music and video. Individuals can now also make telephone calls using Voice of Internet Protocol (“VoIP”) applications available from the content providers (e.g. the VoIP services offered by Vonage).

The consequence of these data-intensive websites and Internet applications is a requirement for increased bandwidth to properly display the content or provide the web-based service.⁷ More often than not, it has been the Internet access providers who have spent their own financial resources to establish the technological infrastructure that has enabled Internet users and content providers to connect with one another.

Some Internet access providers argue that the content providers support network neutrality in order to continue to benefit from the infrastructure investments made by the Internet access providers. As such, the Internet access providers are left being unable to recoup the costs of their investments (e.g. the content providers are effectively “free-riding” on the Internet access providers’ investments). They also argue that legislation or regulation would limit competition in the Internet access service provider market as any form of regulation would increase the costs of new entrants into the market. Finally, they argue that regulation would inhibit innovation if they are required to operate their networks in a particular manner.⁸

On the other hand, the content providers argue that the access providers are opposed to network neutrality regulation so that they can utilize their role as the carrier of Internet traffic to discriminate against certain content providers or to charge content providers an “above”-market price to access Internet end users. Additionally, since many of these access providers also offer services that compete with those offered by the content providers, particularly VoIP services, it is alleged by the proponents of network neutrality principles that the Internet access providers are seeking to increase their share of the market by unfairly using their dominant position.⁹ The net effect, according to the content providers, is the potential for limited competition as smaller content providers would be unable to pay the Internet access providers to have access to end-users.¹⁰

While discussions about network neutrality have occurred in academic circles for several years, the issue exploded onto the minds of many of the interested parties in light of a series of interviews and statements of senior U.S. telecommunications executives late last year. In an interview with *BusinessWeek* in November 2005, the CEO of SBC Telecommunications (now AT&T) responded to a question about how his company would deal with competition from companies such as Google and Vonage. He stated that:

Now what [Google, MSN, Vonage] 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!¹¹

His sentiments were echoed a few days later in statements by the Chief Technology Officer of BellSouth Corp., another major telecommunications company, who indicated that companies such as his should be able to charge certain content providers to load their web pages faster than a competitor's web page and that his company should also be able to charge rival VoIP providers additional fees so that it can operate at the same level of quality as the service offered by his company.¹²

These comments obviously led to considerable concern among the content providers as it was precisely those types of actions that they felt would be allowed to take place if network neutrality principles were not legislated. However, of greater concern to proponents of network neutrality principles were the actions taken by Madison River Communications, a local telephone company in North Carolina. Madison River Communications was alleged to have taken technological measures to block its customers from using VoIP services offered by Vonage. While the FCC ultimately settled with the offending party and required that it not block Vonage's VoIP application, the fact that the company engaged in that behaviour was of considerable concern to content providers.¹³

As mentioned, while the net neutrality debate has had greater exposure in the United States, there have also been examples of Canadian organizations that network neutrality proponents have cited as abusing network neutrality principles. For example, the premium levied by Shaw Communications for its customers to use its VoIP service led net neutrality proponents to conclude that Shaw Communications may be degrading the VoIP service of other VoIP providers (such as Vonage). Another example is that of Telus, which temporarily blocked access to a telecommunications union's website during its labour disputes with its unionized employees.

The legislative response

In light of the foregoing issues, the law has been trying to catch up with the technological developments and there has been a flurry of legislative activity in the

U.S. in this past year. The U.S. Congress has been considering the first set of amendments to the 10-year old *Telecommunications Act of 1996* and intense lobbying has begun to deal with the issue of network neutrality in those amendments. Additionally, no less than 6 different pieces of legislation have been drafted in 2006 including among others, the *Network Neutrality Act of 2006*, the *Communications Opportunity, Promotion and Enhancement Act of 2006* and the *Internet Freedom Preservation Act of 2006*. Some of these bills have passed their respective house of Congress while others were passed and others continue to be under consideration. Clearly, network neutrality is a significant issue as it captured the attention of enough legislators in Washington, D.C.¹⁴

In addition to the U.S. Congress taking action, the U.S. Federal Communications Commission (FCC), the regulatory body in the United States responsible for telecommunications, has also been considering a regulatory response to the network neutrality issue. In fact in September 2005, the FCC asserted that:

to ensure that broadband networks are widely deployed, open, affordable, and accessible to all consumers, the Commission adopts the following principles: ... (i) consumers are entitled to access to lawful Internet content of their choice; (ii) ... consumers are entitled to run applications and use services of their choice, subject to the needs of law enforcement; (iii) ... consumers are entitled to connect their choice of legal devices that will not harm the network; and (iv) ... consumers are entitled to competition among network providers, application and services providers, and content providers.¹⁵

The FCC then proceeded to indicate that it would incorporate the foregoing principles into its ongoing policymaking activities.¹⁶

In Canada, there have also been some preliminary statements regarding Canada's regulatory response to the issue of network neutrality. The Telecommunications Review Panel (TRP), which was established in April 2005 to review Canada's telecommunications industry, issued its final report in March 2006 (the "TRP Report").¹⁷ In many ways the TRP Report mirrors the statements of the FCC and goes so far as referencing the FCC's policy statement. However, the TRP Report also makes more assertive statements

regarding the ability of the regulators to step in and regulate what the access providers are able to do with respect to accessing content on the Internet. In particular, the TRP stated that, in certain cases where consumers are deprived of choice (e.g. when ISPs make preferential arrangements with certain content providers), "regulatory intervention to ensure a form of equal access... may be desirable." While much of the TRP Report suggested that market forces drive the development of Canada's telecommunications industry, the TRP did indicate that the CRTC "should have more discretion [with respect to customer access issues] than in other areas of regulation," given the rapid evolution of technologies and the market dynamics.¹⁸ As such, some have argued that this would direct any legislation to enshrine network neutrality principles.¹⁹

Conclusion

Based on the foregoing, obviously it will be interesting to see how the network neutrality issue will be resolved in the United States and in Canada. Perhaps of greater interest, however, is the effect of two different policy and legislative outcomes arising out of the debates in the jurisdictions. What would the net effect be of Canada adopting pro-net neutrality legislation in conjunction with a very different result in the United States? Given the very nature of the Internet, the resulting legislation in both countries would undoubtedly have effects in the other country. Accordingly, closer attention to this debate is warranted in the coming months.

* *Peter V. Nguyen, Barrister and Solicitor (LSUC) and Attorney and Counsellor-at-Law (New York), practices primarily in the field of technology law. He has worked at a national full service law firm in its Technology Law department and has also been in-house legal counsel to two technology companies in the electronic payments industry. He can be reached by e-mail at peter@peternguyen.ca.*

¹ In the opinion of this author, some of the other key legal developments as it relates to the Internet include the file sharing litigation (e.g. Napster, Grokster), legislative developments with respect to spam (e.g. US CAN-SPAM Act) and the application of existing intellectual property laws to new technologies (e.g. "Tariff 22" decision).

² As it will be discussed herein, while the Canadian Telecommunications Review Panel has made preliminary statements regarding "network neutrality", both the U.S. Federal Communications Commission

and both houses of the U.S. Congress, have taken more concrete steps to address “network neutrality”, either in the form of policy statements or draft laws and therefore have been subject to more scrutiny and debate.

³ Indeed, there are many more technical definitions of network neutrality. As a US Congressional briefing note points out, “there is no single accepted definition of ‘net neutrality.’” See Angele A. Gilroy, “Net Neutrality: Background and Issues,” *CRS Report for Congress*, May 16, 2006 at 1 available at <http://www.fas.org/sgp/crs/misc/RS22444.pdf> (hereinafter “CRS Report”). However, for the purposes of this overview, this definition is adopted as it represents one common understanding of the term.

⁴ However, this does not mean that the results of the search should be the same. Given that the search engines have different algorithms to search content on the various Internet websites, the results of typing in “Canadian Law” on Google may differ substantially from the results generated by Yahoo!

⁵ As Ganley and Allgrove describe it, “The Internet was designed as a “dumb” network. Its central function is to pass packets of data, via “pipes”, along a chain of “nodes” until they reach their destination. The nodes do not ask questions about the sender of the packet, the recipient, or its content; they simply receive them, analyse the address information and pass them on to the next node. This dumb network treats all packets equally...” See Paul Ganley and Ben Allgrove, “Net Neutrality: A User’s Guide,” *Computer, Law & Security Report* (forthcoming 2006) available at SSRN: <http://ssrn.com/abstract=925693> (hereinafter, “User’s Guide”).

⁶ Ganley and Allgrove describe a type of internet router that would allow the access provider to effectively deprioritize or block data originating from a particular source. See User’s Guide, *ibid.* at 1.

⁷ In addition to requiring increased bandwidth, it is also recognized that the certain data, such as video and VoIP data, require to be prioritized in order to be properly reproduced.

⁸ See CRS Report, *supra* note 3 at 3-4.

⁹ It would be unfair, however, to characterize the content providers as simply looking to make money. For example, some opponents of network neutrality regulations in the United States, it is a philosophical opposition to “government intervention” in the free markets.

¹⁰ See CRS Report, *supra* note 3 at 3.

¹¹ “Online Extra: At SBC, It’s All About ‘Scale and Scope’”, November 7, 2005, BusinessWeek

Online, available at http://www.businessweek.com/@n34h*IUQu7KtOwgA/magazine/content/05_45/b3958092.htm

¹² Jonathan Krim, “Executive Wants to Charge for Web Speed,” *Washington Post*, December 1, 2005, available at <http://www.washingtonpost.com/wp-dyn/content/article/2005/11/30/AR2005113002109.html>

¹³ Gilroy summarizes this case in CRS Report, *supra* note 3 at footnote 10.

¹⁴ A wikipedia entry summarizes some of the bills that have made their way through Congress thus far this year. See http://en.wikipedia.org/wiki/Network_neutrality.

¹⁵ “Appropriate Framework for Broadband Access to the Internet over Wireline Facilities,” FCC 05-151, CC Docket No. 02-33, September 23, 2005 available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-05-151A1.pdf

¹⁶ *Ibid.* at 3. Many commentators refer to the Madison River Communications case, mentioned *supra* note 13, as being the first example of the FCC acting on its policy statement.

¹⁷ “Telecommunications Policy Review Panel: Final Report 2006,” available at http://www.telecomreview.ca/epic/internet/intprp-gecrt.nsf/en/h_rx00054e.html (hereinafter “TRP Report”)

¹⁸ *Ibid.* at 6-18.

¹⁹ Professor Michael Geist blogs that the recommendations found in the TRP Report suggests that “the panel is clearly calling for legislated assurances that ISPs will not veer significantly from net neutrality principles.” See “Telecom Policy Review Panel Calls for Net Neutrality Legal Safeguards,” March 22, 2006 available at <http://www.michaelgeist.ca/content/view/1175/125/>