

EXECUTIVE SUMMARY

The concept of internet neutrality provokes widely divergent and strongly held beliefs. Internet neutrality has sparked emotional political, legal and even moral debates. However, this large scale discussion has never clearly defined the effect of internet neutrality on consumer groups. This report aims to present a view of net neutrality from a consumer perspective.

The Public Interest Advocacy Centre (PIAC) and Environics Research conducted 6 focus groups in both English and French in Toronto, Montreal and Vancouver in January 2009 to gauge consumer knowledge and reactions to net neutrality issues facing Canadians. Environics chose these focus group members by virtue of their heavy usage of the internet in their homes as well as their professed interest in public policy issues. PIAC also performed extensive qualitative secondary research, as well as primary research in the form of participation in regulatory hearings before the Canadian Radio-television and Telecommunications Commission, in addition to interviews with stakeholders. This combination of qualitative and quantitative research provided a more thorough examination of the issue, with respect to consumers. Consumers did not seem aware of the debates surrounding net neutrality, however, they demonstrated concern for issues relating to it. Issues such as universal access, privacy, censorship and the commercialization of the internet figured prominently in focus group discussions.

The report also provides an overview of internet network design. How the internet actually “works” and its “end to end” design are an important element to understanding net neutrality. The network is described in various levels, from a large scale, macro-level examination of the entire network down to how exactly internet services are provided to consumers’ homes. An analysis of internet service providers’ deep packet inspection techniques is also provided in the context of internet neutrality principles.

While the debate surrounding net neutrality is a recent phenomenon, the underlying principles of net neutrality can be found in the principles of common carriage. Common carriers must serve upon reasonable request without discrimination, charge just and reasonable prices, and provide service with adequate care, skill and honesty – merely by virtue of common carriers’ status as public callings.

The common carriage rules were developed to be so favourable to the customer, rather than the carrier, largely as a result of the vulnerability of the customer when he or she placed the parcel or the packet or the message in the hands of the common carrier.

These principles of “common carriage” were enshrined in statutory telecommunications law in the early 1900s and it to this day in Canada forbid telephone companies from controlling access or content over its telephone network and from unduly discriminating against competitors and customers’ use of the network.

Under Canada’s *Telecommunications Act*, all telecommunication services, including Internet access as well as wireless and wireline telephone services, subject to these

codified common carriage principles. Section 27(2) forbids providers from unduly favouring or discriminating against any person who uses their service, including the companies themselves. Furthermore, Section 36 of the *Act* forbids unilateral content control by ISPs, except where the CRTC has preapproved such interference.

Therefore it appears that Canada has a common carriage-based set of legal principles upon which to base its regulation of Internet Service Provider and other network operators' practices that should legally help define "net neutrality".

In April 2008, the Canadian Association of Internet Providers (CAIP), a coalition of mostly smaller, independent ISPs, and wholesale customers, filed complaint with the CRTC in regards to Bell Canada's throttling of bittorrent traffic. CAIP alleged that Bell Canada was using DPI technology to throttle peer-to-peer traffic of not only their own Sympatico service customers but also the end-users of CAIP member ISPs. CAIP alleged this violated their wholesale tariff and violated the common carriage sections of the *Telecommunications Act*.

The CRTC determined that that Bell was indeed permitted to throttle CAIP member customers as it was "the only practical option that is technologically and economically suitable, at this time, for addressing congestion in its DSL network" and that regarding discrimination, since all end users of services were treated the same with regard to throttling, that there could be no discrimination. The CRTC also found that the "the fact that the transmission of a file is delayed does not alter its meaning or its purpose".

The CRTC issued a follow-up proceeding calling, promising a wide scope, namely to examine and pronounce upon the legality of: "Internet traffic management practices for both wholesale and retail Internet services" of all Canadian ISPs. Unfortunately for consumers, the CRTC issued "decision" as a "Telecom Regulatory Policy" rather than a "Telecom Decision", meaning all existing internet traffic management practice of ISPs (such as throttling of P2P traffic that ISPs admitted to during the hearing) could continue until challenged under an analytical framework described in the policy.

The CRTC's Internet Traffic Management policy framework created a test for complaints about traffic management that placed a high evidentiary burden on those seeking to invalidate present throttling and other ISP practices that raised the issue of net neutrality. The test further does not appear to favour consumer interests but rather those of ISPs and third party content providers, such a Google. Thus, traffic management practices may lead to such consumer woes as narrowed choice of services and segmented pricing plans, based on usage profiles gleaned from information about application use.

The disclosure of ISPs' traffic management practices, which was ordered by the CRTC in this decision, while providing general awareness that such practices are undertaken, unfortunately are high level and unlikely to assist consumers in grounding complaints.

The CRTC also effectively upheld the CAIP wholesale decision in this larger proceeding, so consumers will be unable to “escape” the status quo of major ISP choices on traffic management.

The only real clear “win” consumers can take from the CRTC’s consideration of net neutrality was the prohibition of any use or disclosure of information gathered from subscribers when DPI was performed on their data streams for any purpose other than traffic control.

Finally, the CRTC created the concept of “time-sensitive” applications which it stated cannot be slowed so as to produce “noticeable degradation” for customers. This is a positive development for consumers as consumers can complain to the CRTC based on this slowing of time-sensitive traffic. Therefore, it appears that the new battleground for the net neutrality debate in Canada may well be over which applications and services are “time-sensitive” and which are not.

In September 2009, the Office of the Privacy Commissioner released its findings with respect to Bell Canada and Bell Sympatico’s use of DPI technology. The Commissioner ruled that Bell needs to provide a clearer explanation of how its DPI equipment uses personal information to manage traffic. This decision, along with the CRTC ruling, gives some comfort to Canadians that ISPs will not sell their Internet data trails to the highest bidder.

Finally, a private member’s bill on net neutrality has been introduced. Such legislative efforts likely will continue but should take the above CRTC decisions into account and more importantly the barriers consumers still face.

Several legal and policy developments on net neutrality have emerged in the United States and in the European Union. In the US, the complaint by public interest groups against Comcast’s traffic management practices resulted in a FCC finding that Comcast’s traffic management techniques were unreasonable, as they discriminated among applications and protocols instead of treating them equally. The FCC is currently in the process of public rulemaking, which propose to preserve open internet broadband industry practices with six principles, including a principle to ensure that all lawful content, applications and services are treated in a non-discriminatory manner.

In the EU, the European Commission has been reviewing the EU Telecom Rules to achieve a new regulatory framework to become law by 2010. An agreement was recently reached to include a new internet freedom provision to strengthen the rights of internet users. This internet freedom provision comes with the guarantee for an open and more neutral internet. With this provision, national telecoms authorities have the power to set minimum quality levels for internet services to promote net neutrality and net freedoms for European consumers. The EU has also been active in investigating and condemning the invasion of consumer privacy by deep packet inspection technology, such as that of Phorm in the UK.

Canada's broadband policy has not been keeping pace with the rest of the world. Recent reports – an OECD study, a Harvard University FCC-commissioned report and an Oxford University and Universidad de Oviedo – illustrated evidence of Canada's low broadband ranking among its peers. If broadband access and higher speeds were made an explicit government priority as has been undertaken in the EU and started in the US, the problems of network capacity might be somewhat alleviated.

Given that the EU and the United States appear to be moving in a direction that wholly recognizes neutrality as a principle for the internet and enumerates principles to protect their broadband consumers, Canada's regulatory efforts have set us back. If ISPs are allowed to continue using their current ITMPs, then Canadian consumers may be looking at a future with a non-neutral internet in Canada. A non-neutral internet could have many implications and produce several undesirable effects for consumers, as supported by PIAC's focus group findings.

For example, a tiered network featuring fast and slow lanes on the internet would mean that websites and content would not be equally accessible to consumers. Consumers are also opposed to traffic shaping and throttling as a means to resolving bandwidth issues. Some participants were willing to accept higher fees for heavy use in order to avoid throttling. As well, the need for high speed internet is growing, but Canadian consumers have not seen the cost associated with internet service come down over time. Some focus group participants suggested that ISPs may not be keeping up with the demand by improving their technology and infrastructure. As well, consumers are very opposed to prohibition or throttling of certain targeted applications or protocols. Privacy is also a great concern for Canadian consumers, who want to ensure that their internet activities are not being tracked by their ISPs or used for marketing purposes. Finally, consumers believe that reseller ISPs should be able to make their own policy decisions about how to manage bandwidth concerns and not be dictated by suppliers.

PIAC calls on Parliament to take leadership on the issue of net neutrality and preserve the consumer right to a neutral internet. As well, Parliament should ensure that consumers are guaranteed rights with their internet access, as outlined in our Recommendations. PIAC also urges the government to set legal broadband service standards with forward looking minimum speed targets for ISPs, similar to the EU approach.

As well, consumers need comprehensive and accessible education about net neutrality and the CRTC decisions. The CRTC, in conjunction with CCTS, must also provide guidance must be given to consumers regarding how to file a formal complaint about the internet traffic management practices of their ITMP and the evidence the consumer would be required to bring forward. The CRTC must also prepare itself to handle consumer complaints about ITMPs and ensure that each consumer complaint is given full consideration. If the CRTC is unprepared to handle consumer complaints, it may wish to consider requesting the CCTS complaint process to accept some ITMP complaints from consumers. Consumers and consumer groups must use this complaint

mechanism to challenge ITMPs under s. 27(2) and s. 36 of the *Telecommunications Act*.

Finally, the Canadian government must provide consumers with protection from the removal of their internet connection without due process of the law for copyright infringement allegations and preserve the consumer right to access the internet.