

# research snapshot

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## Internet Users Should Only Pay for the Actual Demands Which They Place on Internet Service Providers

### What is this research about?

Internet service in Canada is governed by the Canadian Radio-Television and Telecommunications Commission (CRTC) and the Telecommunications Act. However, internet service providers (ISPs) are free to decide how much to charge users, and what services to provide. ISPs serve customers through the distribution of internet data. Internet data does not flow at the same pace to all users. ISPs have the ability to discriminate between different flows of data. Some forms of data discrimination are not harmful: for example blocking viruses from reaching users. Other forms of data discrimination have led to accusations that ISPs are violating the principle of “network neutrality”. That is, the idea that the internet should be as free as possible from restrictions and data discrimination.

### What did the researcher do?

The researcher proposed how to distinguish between positive and negative forms of ISP data discrimination. He sought to find a strategy that allowed both fair discrimination and network neutrality. He defined ideal internet pricing (IIP) as an effective system. The researcher went on to list examples of unfair discrimination by ISPs. He suggested how Canada’s Telecommunications Act should be interpreted. That is, how it should distinguish between positive and negative forms of discrimination.

### What you need to know:

Regulation is required in order to protect network neutrality. That is, the freedom of the internet from unreasonable restrictions. The current Telecommunications Act and CRTC policies are too vague. Internet pricing should address congestion problems caused by heavy-use consumers. If an IIP system is introduced, then customers can be charged for their internet service based on the impact of their usage on the network. The Telecommunications Act should also introduce a consumer education program. This would be in order to inform the public about internet pricing.

### What did the researcher find?

The researcher found that an IIP system was the most effective strategy to regulate network neutrality. It would allow for fair discrimination by ISPs against customers with heavy internet use. Customers with high-demand usage cause internet congestion. This affects other customers as well. In an IIP system, people would be able to pay for different levels of internet service based on their needs. The key components of an IIP system are:

- Charging customers fees that reflect the costs for the ISP to meet their usage demands.
- Charging customers according to the quality of internet service they receive.

- Levying surcharges during peak periods when demand is highest.

This system would have two effects. First, internet pricing would be fair because people would be paying for the demands which their usage places on limited network space. Second, it would also be efficient because the system would balance itself out. That is, people would opt for lower-usage internet applications and switch to lower-demand periods of the day in order to save money.

The researcher also discussed ISP behaviour that the Telecommunications Act should target. That is, behavior that is “unjust discrimination”. He listed four examples:

1. Data discrimination based on the ISP’s legal or moral judgments.
2. Network bias in favour of internet content owned by the ISP or its affiliates.
3. Discrimination against users who are less likely than others to complain, to switch ISPs, or to reduce consumption.
4. Absolute blockades of any internet content which is legal and safe.

The researcher noted that there are some costs to regulating network neutrality and implementing IIP. However, he found that the benefits of doing so would outweigh the costs. It would help the internet flourish as a space for democracy and culture, not just for business and profit. It would also encourage innovation, by allowing new internet content and applications to be accessed on a level playing field by users.

### How can you use this research?

This research can be used to review debates on network neutrality and internet pricing. Given the accelerated growth of internet usage and access, this is very important. This research also serves as a case study for Canadian policy on telecommunications. It

sheds insight on relationships between state policies on regulation and the function of private industries like the internet.

### About the Researcher

Noel Semple is currently a Ph.D student at Osgoode Hall Law School, York University ([mail@noelsemple.ca](mailto:mail@noelsemple.ca)). The publication resulting from this research was the winning entry for the IT.Can Student Writing Competition, 2007.

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### Keywords

Regulation, Policy, Canada, CRTC, Internet service providers, Network neutrality

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