

**Intervention to**

**Northwestel's Tariff Application 1099**

**for Terrestrial Internet Services**

**Tariff CRTC 3001 - Item 1735**

**by Daniel Sokolov**

## Table of Contents

Introduction.....	3
Request.....	4
Broadband Fund's Requirements Not Met.....	5
Restricted Availability of "Unlimited" Options is Unjust.....	7
Thank you.....	9

All internet resource locators included in this submission were accessed November 18, 2020.

# Introduction

I am a resident of Whitehorse, Yukon. As there is no competition, I am, of course, a Northwestel internet customer.

Section 27 (1) of the *Telecommunications Act* requires any rate charged to be "just and reasonable".

Northwestel's Tariff Application 1099 is special; with its Application 1099 the company attempts to partially fulfil obligations stemming from its participation in the CRTC's Broadband Fund program.

As a result, Application 1099 must not only yield just and reasonable tariffs, they also have to conform to the Objectives of the Broadband Fund, including its foundational Telecom Regulatory Policies CRTC 2016-496 and CRTC 2018-377.

Unfortunately, NWTel's Application fails to fulfil both the Broadband Fund obligations and the requirements of the *Telecommunications Act*.

The proposed tariffs are incompatible with s. 27 (1) of the *Telecommunications Act*.

The proposed tariffs are incompatible with the Universal Service Objective of the CRTC's Broadband Fund.

The proposed tariffs are incompatible with Telecom Regulatory Policy CRTC 2016-496.

The proposed tariffs are incompatible with Telecom Regulatory Policy CRTC 2018-377.

# Request

I respectfully request the CRTC to approve NWTel's tariff application 1099 with **added "unlimited" data options available to all cable and FTTH price plans** for consumers for a charge of \$10/month,<sup>1</sup> and for businesses at \$50/month.<sup>2</sup> These price points are derived from NWTel's own application.<sup>3</sup>

Alternatively, the CRTC should approve NWTel's tariff application 1099 with an **added protection clause**. That clause would protect clients from paying more for slower "limited" service than "unlimited" faster service would have cost. In effect, the protection clause would cap monthly charges including overage fees for cable and FTTH access lines slower than 50/10 at \$160.95 for consumers and at \$299.95 for businesses, respectively.

Approving NWTel's tariff application without either change would mean subsidizing affluent households and larger businesses through the Broadband Fund, while leaving less affluent households and smaller businesses behind. That is not what the Broadband Fund was designed to achieve.

Approving NWTel's tariff application 1099 as is would also be incompatible with the Governor in Council's Order Issuing a Direction to the CRTC on Implementing the Canadian Telecommunications Policy Objectives to Promote Competition, Affordability, Consumer Interests and Innovation<sup>4</sup>. There, the Governor in Council has ordered the CRTC i.a. to "foster affordability and lower prices, particularly when telecommunications service providers exercise market power"<sup>5</sup>, and to "ensure that affordable access to high-quality telecommunications services is available in all regions of Canada, including rural areas".

Furthermore, Canada's Connectivity Strategy includes the goal of affordability: "It is important that prices charged be reasonable so that Canadians can meaningfully subscribe and use the services in question. **It is not enough for a service to be available, for if the cost is out of reach**, Canadians cannot take advantage of it. It should be noted, moreover, that the monthly price is not the only factor in affordability. For example, the data usage available, including whether **an unlimited data option is offered, is just as important.**"<sup>6</sup>

---

1 \$10/month in addition to the currently charged monthly fees ranging from \$41.95 for Internet 5 with 5/1 Mbit/s to \$110.95 for Internet 50 with 50/4 Mbit/s.

2 \$50/month in addition to the currently charged monthly fees ranging from \$79.95 for Business 10 with 10/1 Mbit/s to \$309.95 for Business 80 with 80/6 Mbit/s.

3 \$10 is NWTel's proposed cost of an "unlimited" option for Internet 125 and 250; \$50 is the proposed cost for an "unlimited" option for Business 150 when compared with the most economical limited Business 150 plan under a three year minimum contract.

4 <https://laws.justice.gc.ca/eng/regulations/SOR-2019-227/FullText.html>

5 As NWTel is the only terrestrial broadband internet provider in most of its service area, it certainly exercises market power.

6 Quoted from High Speed Access for All: Canada's Connectivity Strategy [https://www.ic.gc.ca/eic/site/139.nsf/eng/h\\_00002.html#1\\_1](https://www.ic.gc.ca/eic/site/139.nsf/eng/h_00002.html#1_1) (Emphasis added.)

# Broadband Fund's Requirements Not Met

Northwestel's tariff application 1099 should have been the first positive outcome of the CRTC's decision to provide more than \$62 million from the Broadband Fund to Northwestel (NWTel) for improving internet for Canadians living and working in NWTel's service area: Access to "unlimited" data allowance options on a permanent basis on cable and FTTH access lines.

The rules for Broadband Fund funding are laid out in Telecom Regulatory Policy CRTC 2018-377, which itself harks back to Telecom Regulatory Policy CRTC 2016-496. There, the Commission "determined that it would establish the [Broadband Fund] to assist in (i) **funding continuing access to the basic telecommunications services** that form part of the universal service objective ...".<sup>7</sup>

That Universal Service Objective includes the availability of internet access with at least 50/10 Mbit/s bandwidth, which NWTel already exceeds in its cable and FTTH areas, and unlimited data options, which are not available and, thus, are to be addressed by the Broadband Fund funding.

In Telecom Regulatory Policy 2018-377 the Commission made it a requirement of Broadband Fund funding, that "different customer needs, including those of low-income households" are met by the resulting tariffs. The "unlimited" options put forth by NWTel fail to meet that requirement.

The Yukon has the second highest share of one-person households (32.2%) of all Provinces and Territories.<sup>8</sup> A low-income single person household has annual income after taxes of less than \$22,133.<sup>9,10</sup> Median rent for a bachelor unit in the Yukon is \$10,800 a year,<sup>11</sup> not including the substantial heating cost nor electricity.

The least expensive "unlimited" internet plan NWTel seeks approval for would cost \$2090.40 (two thousand and ninety) a year.<sup>12</sup> That price point does not meet the needs of any low-income household, let alone a one-person low-income household. Two thousand dollars a year are entirely unaffordable for any low-income household in NWTel's service area.

At the same time, a one-person household usually does not need 50 Mbit/s downstream bandwidth, let alone 10 Mbit/s upstream. Most would be happy with half of these bandwidths – if only they wouldn't

---

7 Emphasis added.

8 Calculated from Statistics Canada's 2016 Census Profile <https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/Page.cfm?Lang=E&Geo1=PR&Code1=60&Geo2=&Code2=&SearchText=Yukon&SearchType=Begins&SearchPR=01&B1=All&GeoLevel=PR&GeoCode=60&type=0>

9 Statistics Canada, Low-income thresholds for private households of Canada, 2015 [https://www12.statcan.gc.ca/census-recensement/2016/ref/dict/tab/t4\\_2-eng.cfm](https://www12.statcan.gc.ca/census-recensement/2016/ref/dict/tab/t4_2-eng.cfm)

10 Less affluent households are hit the hardest by the economic outfall of the Coronavirus pandemic. More households will have fallen below the low-income thresholds, and household which were low-income before the pandemic are highly likely to be even poorer now. Unlimited internet access would enable these Canadians to access not only government resources online, but also education, to build a better future for themselves.

11 Yukon Bureau of Statistics, Yukon Rent Survey April 2020 [https://yukon.ca/sites/yukon.ca/files/rent\\_apr20.pdf](https://yukon.ca/sites/yukon.ca/files/rent_apr20.pdf)

12 \$160.95 per month for Internet 50+, plus \$4.95/month modem rent, plus 5% GST, makes \$174.20, multiplied by 12 months makes \$2090.40. In addition, NWTel charges a one-time installation fee of \$155.45 incl. Tax. No telephone service is included in that cost.

have to worry about ruinous overage fees. Which is why unlimited options are most urgently needed for those slower access lines.

50/10 is a nationwide standard, set with high quality broadband services in mind. However, **NWTEL does not provide high quality service**, as the Commission has determined in Telecom Decision CRTC 2108-241 and confirmed in Telecom Decision CRTC 2019-119. As a result, the higher bandwidth access lines are less attractive to NWTel clients than to clients of high quality service providers. And the lower quality service increases the need for higher data allowances: Lower quality service leads to more page reloads by users, more connection timeouts, more automated retransmissions,<sup>13</sup> and to the activation of more robust error control mechanisms, all of which increase the amount of data transferred over an access line without any added benefit to the user.

As the Commission has determined, the Broadband Fund is meant to fund continued access to **basic telecommunications services**. Internet access with triple digit Mbit/s of bandwidth is anything but basic. Rather, it is an opulent indulgence in the remoteness of Canada's North.

Approving NWTel's tariff application without adaptations would mean to use Broadband Fund subsidies to make opulent broadband services already including sizable data allowances even more lavish with "unlimited" data allowance, while leaving less affluent households face painful overage charges and thus limit their access. Such a use of Broadband Fund funds meets neither the Commission's determination to fund access to **basic** telecommunication services, nor the public interest.

Public interest is to ensure affordable basic broadband access without fear of serious overage charges for all Canadians – if necessary with subsidies. There is no public interest to subsidize those who can afford opulence.

---

13 [https://en.wikipedia.org/wiki/Retransmission\\_\(data\\_networks\)](https://en.wikipedia.org/wiki/Retransmission_(data_networks))

# Restricted Availability of "Unlimited" Options is Unjust

Unlimited data is technically impossible. Every access line has a limit for how many bits can be transported per second, and any given month has a limited number of seconds.

When NWTel says "unlimited", they actually mean up to 100 TByte/month.<sup>14</sup> In other words, for an additional consideration of \$10/month, NWTel increases the included data allowance with Internet 125 from 600 GByte (0.586 TByte) to up to 43.1 TByte, and from 750 GByte (0.732 TByte) to up to 83 TByte on Internet 250.<sup>15</sup>

With all proposed "unlimited" options, the cost per additionally included GByte is a fraction of a cent. Even when a consumer with an "unlimited" option uses just 5% of their total monthly data transfer capacity, their additional charge of \$10 is only a fraction of a cent per additional GByte transferred.<sup>16</sup>

**Not offering any unlimited options with plans slower than 50/10 is unjust – and thus a violation of s. 27 (1) of the Telecommunications Act.** While households and businesses who can afford to pay triple digit amounts per month for large data volumes would get massively better value-for-money with "unlimited" options, households who can not afford that would be penalized with massive overage fees.

For years, NWTel has claimed that the reason they can't offer "unlimited data" options (absent subsidies) is that "unlimited" options would overload NWTel's network,<sup>17</sup> and that "unlimited" data options increase costs as more network resources have to be provisioned.<sup>18</sup>

Absurdly, NWTel now wants to offer "unlimited" use with the fastest access lines only, while excluding the slower ones. Yet the faster an access line is, the more load it can put on the network, the more costly provisions NWTel has to make. The data volume an Internet 250 client might transfer in a day exceeds the data volume an Internet 5 client can transfer in a whole month. If overloading the network is the challenge, as NWTel has claimed for many years, it does not make sense to entice the powerusers to stress the network.

Ten clients with Internet 20 could not put as much load onto the network as a single Internet 250 user at any given time, even if they tried hard. Yet these ten Internet 20 clients together would pay \$799.50 a month plus overage charges, while the one Internet 250 client would pay \$239.95, plus \$10 for the "unlimited" option if they so chose.

---

14 Up to 18.8 TByte with Internet 50+ and Business 50+, up to 43.1 TByte with Internet 125, up to 83 TByte with Internet 250, up to 51.7 TByte with Business 150, and up to 100 TByte with Business 300. These are theoretical maxima; data volume achievable in real life would be somewhat less.

15 Comparison of Internet 50+ is not straightforward, as no "limited" 50/10 lines are offered or proposed by NWTel.

16 For example, Internet 250 currently includes 750 GByte (0.732 TByte) data allowance. Theoretically, that line could transfer up to 83 TByte a month if used a maximum speed for the full month. Used at 5% of capacity, 4.15 TByte would be transferred – or 3.4 TByte more than the data allowance currently included in Internet 250. NWTel proposes an additional charge of \$10 for the "unlimited" data option. 3.4 TByte for \$10 equals less than \$0.003 per GByte.

17 In the Commission's words in Telecom Decision 2105-78: "(NWTel) submitted that it had not offered an unlimited subscription option out of concern for the impact it would have on customers' Internet performance and experience."

18 "Unlimited internet does cost more money, it costs more money to provision more network resources." Curtis Shaw, President NWTel, at the Every Community Information Session for the Yukon, hosted by NWTel on October 20, 2020, minute 29; recording available at <https://bell.media-server.com/mmc/p/yb2458zt>

This makes NWTel's proposed tariff unjust, because the Act requires that **every** rate charged is just, which includes the requirement that the tariff must be balanced in itself.

The solution is simple: Apply the same optional fee for "unlimited" data allowances proposed by NWTel for its fastest access lines Internet 125, Internet 250, Business 150, and Business 300 to all slower lines as well. Of course that is still not perfectly just, as clients with the slower lines can only transfer a fraction of the data that the high-end clients can transfer in a month<sup>19</sup> – but the added benefit of simplicity and affordability make that remaining injustice acceptable.

The attached chart compares NWTel's current cable and FTTH plans with the "unlimited" options and plans proposed by NWTel. Included are calculated costs per TByte for hypothetical clients who use their line at full speed for the entire month, at 25% on average, and at 5% on average, respectively. The enormous differences in value-for-money are apparent. At the same time, the plans with decent "value for money" are unaffordable to many households, even to many above the low income threshold.

In 2014/15, the Commission studied NWTel's tariffs and, with minor adjustments, declared them legal on March 4, 2015.<sup>20</sup> That was over five and a half years ago – more than a century in internet years.

Today, the Commission is specifically concerned with (lack of) "unlimited" options, which were not on the table back then. Furthermore, the Commission has provided more than \$62 million from the Broadband Fund.

As a result, the decision rendered by the Commission in 2015 cannot serve as an argument regarding the entirely new "unlimited" elements now proposed.

**Additional grave injustice** would come from withholding unlimited options from access lines with less bandwidth than 50/10: **Clients on slower access lines could well be required to shoulder multiple times the cost of clients on fast access lines with "unlimited" data allowance**, although the faster access lines require higher investment by NWTel.<sup>21</sup>

That injustice can be averted by either offering "unlimited" options at the same additional cost available to faster lines, or, alternatively, by introducing a protection clause, which is a ceiling for overage fees: Clients on slower access lines who can not avail themselves of an "unlimited" option would continue to pay overage fees, but their total cost in a month would never be higher than the least expensive "unlimited" plan, which is \$160.95 for consumers and \$299.95 for businesses.

Clients would still receive the slower, limited service they have signed up for, and would keep paying overage fees of \$2/GByte, but only until their combined cost of monthly base charge and overage fees reach \$160.95 (or 299.95 with business lines). This would be a big step towards just tariffs and a huge relief for many Northern households, currently plagued and stressed by bill shocks.

---

19 An Internet 5/1 client could hypothetically transfer up to 1.88 TByte in a month, while an Internet 250 client could transfer up to 83 TByte. A Business 10 client could transfer up to 3.45 TByte in a month, while a Business 300 client could transfer up to 100 TByte.

20 Telecom Decision CRTC 2015-78

21 For example, an Internet 20 client who uses 500 GByte in a month would currently have to pay \$680 overage charges.



# Thank you

I acknowledge the Commissions' Notice of Consultation CRTC 2020-367, initiating a review of the regulatory framework for NWTel. However, time is of the matter. Northerners need affordable, unlimited access now, and can no longer wait for potential changes to the regulatory framework and any change that that may eventually bring. NWTel's tardy filing of Tariff Application 1099 has already caused unnecessary delay, which costs Northern families dearly.

Children need to attend school online now, adults must earn a living using online services now, Canadians must connect to loved ones and health services today. The prevalent stress about overage fees adds to our mental health crisis.

The Yukon already had almost triple the national suicide rate (27.2 to 30.3 v. 10.3 to 11.4 per 100.000 inhabitants), prior to the Coronavirus pandemic and it's economic toll. The Northwest Territories didn't fare much better (20 to 28.9).<sup>22</sup>

The Government of Canada has developed a *Suicide Prevention Framework*.<sup>23</sup> It lays out a *Suicide Prevention Continuum*. The very first "Type of Activity" listed for "Intervention" is: "Crisis and distress line services (via telephone and **Internet**)".<sup>24</sup> In that very crucial way, affordable, stress-free (!) internet access that allows for video conferencing becomes a question of saving lives.<sup>25</sup>

I hope the Commission will take action to ensure its Broadband Fund yields the most efficient and effective outcome for Northerners.

Thank you to the Commissioners and their staff for reviewing my submission. Your time is valuable. Please put it to good use for Canadians in the North.

Daniel Sokolov

---

22 [https://www.suicideinfo.ca/wp-content/uploads/2020/02/SOURCE-DATA\\_SUICIDE-STATISTICS\\_CANADA\\_PROVINCES\\_TERRITORIES\\_Updtd-6-Feb-2020.xlsx](https://www.suicideinfo.ca/wp-content/uploads/2020/02/SOURCE-DATA_SUICIDE-STATISTICS_CANADA_PROVINCES_TERRITORIES_Updtd-6-Feb-2020.xlsx)

23 <https://www.canada.ca/en/public-health/services/publications/healthy-living/suicide-prevention-framework.html>

24 <https://www.canada.ca/en/public-health/services/publications/healthy-living/suicide-prevention-framework.html#a6>

25 Miller, K. (2009). The Potential of the Internet in Suicide Prevention. *Counselling, Psychotherapy, and Health*, 5(1), The Use of Technology in Mental Health Special Issue, 109-130,

<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.587.9187&rep=rep1&type=pdf> ; for practical examples of Telehealth for suicide prevention in rural areas see "Suicide Rates in Farming Communities Push States to Act" at <https://www.efficientgov.com/community-development/articles/suicide-rates-in-farming-communities-push-states-to-act-G4anhBMmrUzNVcdX/>