

VIA EPASS

April 14th, 2009

Mr. Robert A. Morin
Secretary General
Canadian Radio-television and Telecommunications Commission (CRTC)
Ottawa, Ontario K1A 0N2

Dear Mr. Morin:

**Re: 2009-03-13 - # 8740-B2-200904989 - Bell Canada - TN 7181
General Tariff - Gateway Access Service**

1. *First, I wish to deplore the total lack of organisation and process guidance on the part of the CRTC for this issue. Early in the process, I was informed by a telephone agent that this file was suspended due to the stay of execution request for 2008-117 which was the instigator for Bell filing this tariff. This past Thursday, I was told to expect a new process to be published before the deadline, and this afternoon, I am told the absolute deadline is tonight. There has been no information published on the CRTC web site to provide any official guidance to ensure everyone got the same message with regards to process.*
2. Paragraph 1 of the Bell TN-7181 document refers to "minor housekeeping changes". The changes Bell proposes in TN-7181 represent a radical restructuring of the GAS service which will have very serious impact on the viability of competitive access in Québec and Ontario.
3. TN-7181 will further advance Bell's plan to turn independent competitors into mere resellers of Bell's retail product ("Sympatico") with Bell defining all aspects of the service levels and ensuring that independent's offering cannot be superior to Sympatico's. Bell's actions with regards to GAS service in the last 18 months paint a clear path to Bell obtaining an effective monopoly. Bell has gone as far as threatening to stop investing unless it obtains a monopoly for upgraded last mile infrastructure.
4. The CRTC must take a step back and look at the big picture instead of blindly approving every little "housekeeping" change requested by Bell. If the policy of this country is to foster a competitive environment, then each service provider must be given the freedom to define its own offering by buying the capacity needed to deliver that service. Bell Canada must not be allowed to artificially restrict independent providers.
5. In paragraph 9, Bell mentions that the present flat rate pricing is no longer appropriate. The CRTC needs to be reminded that **current GAS tariff is not flat rate pricing**. The AHSSPI portion of GAS pricing is capacity based which means that GAS customers need to purchase sufficient AHSSPI capacity to support usage from their retail customers. Capacity pricing is one of the reasons the Internet thrived and why usage based X.25 withered away.
6. Commercial internet transit providers thrive with capacity based pricing. Bell has avoided stating that GAS was not profitable. So why has Bell not upgraded its infrastructure to provide the increased AHSSPI capacity that ISPs keep on ordering? How come Bell Canada complains about ancient ATM equipment when it could have upgraded them years ago to reduce costs and increase capacity?
7. Perhaps the CRTC should require Bell Canada to produce audited financial report to prove whether the revenue generated by GAS is sufficient to make the service viable (pay for upgrades + reasonable profit).

8. In paragraph 11, Bell Canada uses the term "unlimited traffic". A more accurate term would be "un-metered" since Bell Canada still controls the ADSL speed profiles which determines bandwidth usage.
9. In paragraph 11, Bell Canada refuses to divulge the percentage of its customers who are still on un-metered plans. As long as Bell Canada grandfathered 1 customer and cannot publicly claim that the percentage is now down to 0 %, then the imposition of metered billing to all GAS customers is discriminatory since Bell Canada gives itself undue advantage by grandfathering its customers but not allowing independents to do the same.
10. In paragraphs 12 and 13, Bell Canada again tries to justify its throttling practices. In the 2008-108 decision, the CRTC refused to consider HOW throttling was applied. This becomes important when it comes to metered billing. If a throttled TCP flow sees an over 20% packet loss, this means that over 20% of packets will be retransmitted and thus billed twice. Can the CRTC really allow a common carrier to purposefully cripple a connection in such a way that it increases its revenue ?
11. Since throttled connections are nearer to dial-up speeds than they are to high speed internet, perhaps the CRTC should deny Bell Canada the right to meter throttled traffic. This would give some incentive for Bell to upgrade its network so it could stop throttling and bill for that type of usage.
12. Furthermore, in the case of upstream traffic (from end user to the ISP), Bell Canada will be dropping packets before they reach the ISP. Bell would be counting packets that the ISP will never see which will lead to extremely difficult reconciliation capabilities in case of billing disputes. This would be compounded by different billing cycles as well as different usable sampling intervals. If Bell samples every hour, while an ISP samples only at the end of a PPPoE session, this means that traffic counted in one month by Bell may be counted in the next month by the ISP because an end user's PPPoE session ended after the start of new month. An of course, different billing cycles would make verification of accuracy of Bell's data impossible.
13. Bell Canada wishes to apply retail level account management to a wholesale service. This creates a situation where the end user, having no business relationship with Bell, is thus unable to initiate at dispute resolution. This would put a huge workload on ISPs having to open individual tickets with Bell for dispute resolution at the retail level.
14. Will Bell Canada provide an accessible and secure way for any GAS end user to consult the usage meter maintained by Bell Canada ? If not, how can end users ensure they do not go over Bell Canada's interpretation of the 60 gig limit ?
15. What about ISPs who do not currently offer metered billing and do not have the infrastructure (and time) to implement Bell's wishes ?
16. What about ISPs who have customers on 1 year contracts for un-metered service ? Will those ISPs be forced to pay Bell for any usage above 60 gigs, potentially putting them out of business ?
17. Bell Canada has not divulged exactly what will be counted. Will it count PPPoE packet headers as data ? Will it count the full payload of the PPPoE packet as data, or will its DPI equipment dig down to count only the data payload of packets ?

Bell Canada's May 15th response to the CAIPvsBell (throttling) interrogatory:

docs-911097-Part VII - Responses to interrogatories - Bell Canada - Attachment 15May08-7.DOC

Therefore, by design, the DPI devices deployed in Bell Canada's network do not:

- use any personal identification information of an individual subscriber;*
- store or log any personally identifiable information;*
- have specific knowledge of a user's real identity;*

18. Bell Canada must be tasked to reconcile the above promise made last year with its new ability to generate billing that is associated with each customer of an independent ISP. Obviously, Bell Canada would need to store usage information associated with some form of identification which can be linked to a specific subscriber.

In paragraph 13 we find:

a further step in the evolution of pricing to reflect the realities of the Companies' need to manage capacity on their networks.

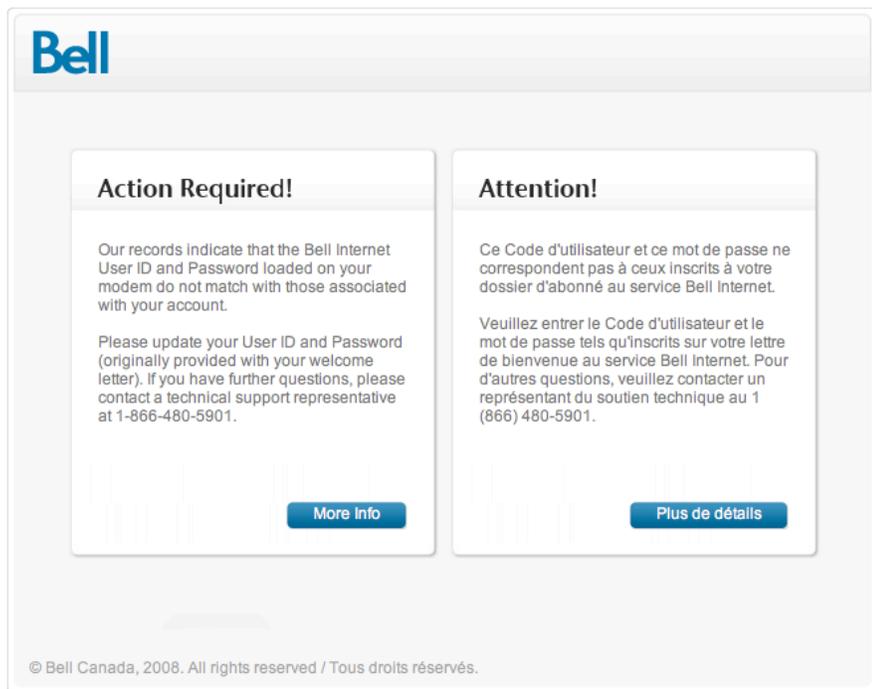
19. Bell Canada must be told, in no uncertain terms that when it sells 1 gigabit of capacity to a GAS customer, that it must provide this capacity. This is a core principle of business. When you sell a service, you must provide this service. In the context of GAS, the "manage capacity of their networks" must be interpreted as "ensure that the network has sufficient capacity to supply the service being sold to customers".
20. The GAS service is a capacity based point to point service and this is very different from a retail internet offering.
21. How would a bank react if Bell agreed to sell it a 1gbps service that Bell knew it didn't have the capacity to provide ?
22. In paragraph 14, Bell refers to retail metered usage with retail prices. The CRTC must decide whether this wholesale service should remain a wholesale service that independent ISPs buy in sufficient quantity to provide their own differentiated and competitive service, or whether the ISPs will be limited to resell retail Sympatico with allowed differentiation limited to the format of invoices and accent of customer support representatives
23. In paragraph 20, Bell Canada explains how it has generated sample billing. Since this billing will contain information associated with individuals who are not Bell Canada customers, it is critical that the CRTC force Bell Canada to make such samples public so that all can see exactly what information is being collected and ensure that Bell Canada respects various privacy laws as well as article 7 of the Telecommunications Act.
24. In paragraph 20, Bell Canada proposes that the new tariffs take effect May 31 2009. I have recently changed ISPs and while doing research, no ISP could give me any idea of what their new prices/offerings would be should Bell's new tariffs be approved. Since independent ISPs will not only have to adjust their offering, modify/write billing software to handle Bell's data and provide at least one month notice to customers, an implementation date of May 31 is not realistic. The CRTC should also consider the issue of ISPs forced to honour customer contracts at a loss.

Flexibility to switch ISP and equipment

25. In paragraph 24, Bell Canada states: *This can occur, for example, when an end-user uses modems from more than one ISP.* ADSL technology is modem agnostic. From the ADSL point of view, the modem itself has no address and can be replaced by the user without Bell Canada's involvement. The provisioning is done entirely by the DSLAM to a telephone line. (This is different from DOCSIS where the modem's identity is used as credential to provision the modem with service parameters).
26. Recently, some users of a Bell forum on DSLR, have mentioned that Bell Canada redirected their web traffic to a Bell Canada web page <https://wg3.sympatico.ca/>. This appears to imply that Bell Canada

is now tracking the ethernet address (MAC) of the CPE device generating the PPPoE packets (aka, the router) and associating it with a specific PPPoE username. Should the user change either, his attempts to connect to the Web (HTTP) will cause the above page to be displayed instead.

28. Sympatico does not use GAS and Bell's relationship with Sympatico is not regulated by the CRTC. However, the CRTC must ensure that Bell Canada does not deploy such system for end users of the GAS service. Under GAS, end users must retain the ability to manage/change their own equipment without Bell Canada being involved, and they must retain the ability to use PPPoE logins of multiple providers.



29. In the case of customers switching ISPs, the new ISP can usually create the PPPoE credentials well before the official cut off date, allowing the new customer to switch back and forth between the old and the new ISP during the cut-over period. This allows for a smooth, almost transparent cut-over, especially for small businesses who operate their own web/mail servers (a market which Sympatico does not serve). This is one of the few advantages of the generally inferior PPPoE service (compared to HSA). The ease of switching ISPs is a major asset when one wishes to foster a competitive environment.
30. Furthermore, in the current GAS tariffs, the end user's primary ISP pays the \$20.50 fixed fee for the ADSL line (the copper loop). When the customer establishes a PPPoE session to any ISP, the session then uses the AHSSPI capacity which was purchased by that ISP.
31. Therefore, it is not unethical to have a full subscription to ISP-A, and have a login-only subscription to ISP-B. Bell Canada gets the fixed fee for the copper ADSL loop from ISP-A, and the user consumes AHSSPI capacity paid by whichever ISP he is currently logged-in. Bell Canada has apparently used strong wording to coerce independent ISPs to stop offering such flexibility.

32. The ability to have multiple subscriptions does not deprive Bell Canada any GAS revenues. It provides an important backup functionality for end users who can use their subscription to ISP-B when ISP-A is experiencing problems, and greatly fosters competition by allowing customers to use test accounts to test the waters before changing ISP.
33. Should the CRTC allow Bell to implement the metered billing (UBB), it should ensure that Bell Canada associates usage to a PPPoE username and not to the telephone line (or DSLAM circuit number associated with that line).
34. By associating usage to a PPPoE username/domain, it would ensure that the ISP responsible is billed for that usage and can in turn bill its customer. This would allow an end user to maintain subscriptions to multiple ISPs with one ISP being billed for usage while logged onto another ISP, or one ISP getting some bulk bill because there is no user identification.

DISCUSSION OF THE ACTUAL TARIFF

35. Item 3 (u): As a wholesale service, Bell Canada should not have the right to decide to terminate service of an end user after he has consumed over 300gigs of data. As a wholesaler, Bell Canada should notify the ISP of this situation and let the ISP deal with that user according to that ISP's own policies.
36. Item 4 (f): See previous paragraph. All usage should be associated with the username/domain used when establishing the PPPoE session.
37. Usage charges: One has to consider users who, because of long or poor line conditions, are unable to achieve high speeds. They should be allowed to use one of the lower speed tiers while getting the same monthly usage allowance. Why should they be forced to pay for a speed they are unable to achieve just to get a reasonable monthly allowance ?
 - 37.a The ridiculously low monthly allowances makes the lower speed tiers useless in the 21st century. The price difference between tiers is not sufficient to warrant such drastic differences between monthly limits.
 - 37.b In fact, one could argue that since lower speed profiles will have smaller congestion impact on aggregation network, they should be given greater monthly allowances.
 - 37.c While the 60 gig limit may satisfy the target demographics for Sympatico (grand mothers uncles and aunts), users who need more have fled towards ISPs who are willing to buy sufficient capacity to serve their different needs. A result, it is not uncommon to find ISPs who have set limits to 200gigs per month and who will increase those limits as internet transit costs continue to come down. For such users, the new tariffs represent over 100% increase in per user costs because of the \$22.50 charge to go from 60 gig to 200 gig per month.
 - 37.d As leading edge uses become popular and widespread, this 60 gig limit will hinder use for more and more people.

The need for ISPs to adapt, compete, remain nimble and innovate.

38. Because of the quickly evolving nature of the Internet and the downward trend in the cost of internet transit capacity, independent ISPs have been able to increase their monthly usage limits over the years. Some have even been able to introduce innovative pricing with un-metered usage for upstream, and generous allowance for downstream. Some had metered peak hour usage with un-metered off-peak. Others gradually increased their monthly limits as transit costs went down. The proposed tariffs would stifle all such innovative and nimble pricing and prevent independent ISPs from leading the industry by tying them down to legacy telco pricing cast in CRTC concrete.
39. In the past years, the Bell/Cable duopoly have played games of who can introduce restrictions without losing too many customers. Bell might introduce usage limits to see if the cable company will follow. If the cable company does not follow and Bell finds it is losing too many customers, the usage limits magically disappear. There have been instances where differences between Rogers and Videotron have resulted in Bell offering un-metered in one province and metered usage in another province in order to match the local cable competition. Usage limits have come and gone a number of times for Sympatico. And while Bell may currently not officially offer an un-metered product, there are many stories of customers being able to negotiate such a package via customer retention departments.
40. By approving these tariffs, the CRTC would condemn the independent ISPs to being stuck in concrete, unable to move and offer innovative pricing and service features, while unregulated Sympatico would be able to move as it wants, raise the monthly limit and/or reintroduce un-metered service, and/or continue to offer unpublished un-metered contracts.
41. In other words, Sympatico retains full flexibility to change its service pricing and features while independent ISPs are stuck with uncompetitive pricing.
42. By approving these tariffs, the CRTC condemns Canada to a duopoly of Telco/Cable without innovative competition from smaller more nimble 3rd parties. This is not a housekeeping change.

Jean-François Mezei
Vaxination Informatique
86 Harwood Gate
Beaconsfield, Québec
H9W 3A3
jfmezei@vaxination.ca