Telecom Decision CRTC 2010-255

Ottawa, 6 May 2010

Bell Aliant Regional Communications, Limited Partnership and Bell Canada – Applications to introduce usage-based billing and other changes to Gateway Access Services

File numbers: Bell Aliant Tariff Notice 242, Bell Canada Tariff Notice 7181

The Commission approves, with changes, applications by Bell Aliant and Bell Canada to introduce an economic Internet traffic management practice for their wholesale Residence Gateway Access Services (GAS). The Commission also approves an additional speed option for each of Residence GAS and Business GAS. The dissenting opinion of Commissioner Molnar is attached.

Introduction

1. On 13 March 2009, the Commission received applications by Bell Aliant Regional Communications, Limited Partnership (Bell Aliant) and Bell Canada (collectively, the Bell companies) to introduce two new speed options for their wholesale Gateway Access Services (GAS):[1] one for Business GAS and one for Residence GAS. The Bell companies' applications also proposed to introduce usage-based billing (UBB) rates for wholesale Residence GAS.

2. According to the Bell companies' proposal, for each Residence GAS speed option, a GAS Internet service provider (ISP) would pay the following for each of its end-users:

   - a monthly flat-rate charge that would cover both Internet access and an Internet usage allowance, up to a predetermined threshold (usage threshold);

   - a per-gigabyte (GB) rate for monthly usage generated by the end-user above the usage threshold (overage), which would be capped;

   - a per-GB charge for usage in excess of 300 GB monthly for a GAS ISP's end-user (excessive usage charge) if, and when, the Bell companies introduce a corresponding charge for their retail residential Internet service (retail Internet service) customers on UBB plans at that time.

3. The Bell companies' proposed method of implementing their UBB rates and billing GAS ISPs would also include an uncorrelated usage charge.[2]

[1] GAS is a wholesale service that the Bell companies are required to provide to competitors so that competitors can provide retail services, notably retail residential Internet services, to their own end-users.

[2] Uncorrelated usage is Internet usage generated by a GAS ISP's end-user that the Bell company submitted it cannot match, or correlate, to that end-user when billing the GAS ISP.

4. The Commission received submissions from Acanac Inc., Accelerated Connections Inc., AOL Canada, Aventures en Excellence Inc., the Canadian Association of Internet Providers, the Coalition of Internet Service Providers inc., Cybersurf Corp., Distributel Communications Limited, EGATE Networks Inc., Electronic Box, Execulink Telecom Inc., Managed Network Systems, Inc., MTS Allstream Inc., the Ontario Telecommunications Association, Primus Telecommunications Canada Inc., TekSavvy Solutions Inc., Telnet Communications, l'Union des consommateurs, Vaxination Informatique, and Yak Communications (Canada) Corp (collectively, the interveners). The interveners opposed the applications in relation to Residence GAS.

5. The Commission also received a large number of comments, mostly from individuals, that almost unanimously opposed the Bell companies' applications.

6. The public record of this proceeding, which closed on 18 December 2009, is available on the Commission's website at www.crtc.gc.ca under "Public Proceedings" or by using the file numbers provided above.

Background and issues

7. The Bell companies submitted that their proposal is one component of their three-prong Internet traffic management strategy.[3] They submitted further that usage-sensitive pricing models have been approved for the major incumbent cable carriers' wholesale third-party Internet access (TPIA) services,[4] and that approval of their proposal would result in competitive equity with respect to the cable carriers' wholesale TPIA services.

8. In Telecom Order 2009-484, issued 12 August 2009, the Commission approved on an interim basis, with one change, the Bell companies' applications to introduce UBB rates, including an excessive usage charge for Residence GAS, and established a date for the implementation of UBB. In Telecom Decision 2009-658, issued 21 October 2009, the Commission confirmed its interim approval but varied the implementation date for UBB to an unspecified date.

9. The Commission notes that its determinations to approve the Bell companies' applications on an interim basis were necessarily based on the record that had been developed at the time of those determinations. By contrast, the Commission's determinations set out below, as to whether the Bell companies' applications should be approved on a final basis and if so, on what terms, have been made on the basis of the complete record of the proceeding. In disposing of these applications on a final basis, the Commission has had the benefit of a more fulsome and detailed record.

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[3] The Bell companies described the other two prongs of this strategy as investing in capacity through managed capital spending and managing bandwidth using technical measures.

[4] TPIA is a wholesale service that the major incumbent cable carriers are required to provide to competitors so that competitors can provide retail residential Internet services, and other retail services, to their own end-users.

10. The Commission has identified the following five issues to be addressed in this decision:

    I. Should the Bell companies' additional wholesale GAS speed options be approved?

    II. Should the Bell companies' proposal (excluding proposed rates) be approved and, if so, on what basis?

    III. Are the Bell companies' proposed rates just and reasonable?

    IV. What implementation period would be appropriate?

    V. Are the Commission's determinations consistent with the Policy Direction?[5]

I. Should the Bell companies' additional wholesale GAS speed options be approved?

11. The Bell companies proposed to introduce two new speed options, to be provided on their legacy asynchronous transfer mode (ATM) networks: one for Residence GAS, with speeds of up to 2 megabits per second (Mbps) downstream and up to 800 kilobits per second (Kbps) upstream; and one for Business GAS, with speeds of up to 1 Mbps downstream and up to 640 Kbps upstream. The Bell companies submitted that these new speed options would ensure that their retail asymmetric digital subscriber line (ADSL) speeds provided over legacy networks are available to wholesale customers, where there is wholesale demand for such speeds, consistent with the Commission's matching speed requirement set out in Telecom Decision 2008-117 and Telecom Order 2009-111.

12. While certain interveners objected to the Bell companies' proposal to match only those retail service speeds provisioned on their legacy networks, no intervener submitted that the new speeds should not be approved. Given that the proposal is consistent with the Commission's matching speed requirement, the Commission **approves** the Bell companies' two new speed options.

II. Should the Bell companies' proposal (excluding proposed rates) be approved and, if so, on what basis?

13. The Commission set out its regulatory approach regarding the use of Internet traffic management practices (ITMPs) in Telecom Regulatory Policy 2009-657 (the ITMP decision). In that decision, the Commission adopted a framework to be applied in determining which ITMPs are acceptable (the ITMP framework). After the ITMP decision was issued, the Bell companies and certain interveners submitted their views on whether the Bell companies' proposal complied with the ITMP framework.

14. The Commission notes that the ITMP framework only applies to its assessment of existing ITMPs in response to complaints filed with the Commission, and not to its assessment of applications to introduce economic ITMPs for wholesale services, such as GAS. In the

[5] *Order Issuing a Direction to the CRTC on Implementing the Canadian Telecommunications Policy Objectives*, P.C. 2006-1534, 14 December 2006

ITMP decision, however, the Commission also set out its approach to assessing such applications. The Commission found that, relative to technical ITMPs, economic ITMPs are generally not considered unjustly discriminatory. The Commission notes, however, that specific applications to introduce economic ITMPs must be consistent with subsection 27(2) of the *Telecommunications Act* (the Act).[6] Further, in the ITMP decision, the Commission found that applications to introduce economic ITMPs for wholesale services would be evaluated using ordinary principles for rate approvals.

15. Based on the above, in considering whether to approve the Bell companies' proposal, the Commission will first determine whether the Bell companies are proposing an economic ITMP for Residence GAS. The Commission will then consider the issue of equivalent treatment.

Is the Bell companies' proposal for wholesale Residence GAS an economic ITMP?

16. As mentioned above, the Commission notes that the Bell companies' proposal would require a GAS ISP to pay, for each of its end-users and for each Residence GAS speed option, a monthly flat-rate charge for Internet access and usage up to the usage threshold, as well as a per-GB overage charge. The Bell companies proposed usage thresholds of 2 GB, 20 GB, and 60 GB for the 512 Kbps, 2 Mbps, and 5 Mbps speed options, respectively. They proposed to cap the overage charge, which would vary by speed option, at $22.50 (or 25 percent lower than their retail rate) for all speed options.

17. The Bell companies also proposed to apply a per-GB excessive usage charge for a GAS ISP's end-user if, and when, they introduce a corresponding excessive usage charge for their retail Internet service customers on UBB plans at that time. The Bell companies further proposed to introduce an uncorrelated usage charge.

18. The Bell companies submitted that their proposal is intended to implement a rate structure that prices GAS proportionately to the value it provides to GAS ISPs and their end-users, thus encouraging end-users to adjust their behaviour to match their usage to their willingness to pay for that usage. The Bell companies submitted further that they designed the proposal so that the existing rate structure would, in effect, continue to apply to most GAS ISP end-users, while overage charges would only apply to the heaviest users.

19. The interveners generally objected to the structure of the Bell companies' proposal. Certain interveners submitted that the proposal, which would be applied all day, every day, is not an economic ITMP because it would not incent end-users to shift their usage from peak usage periods to non-peak periods. The Bell companies submitted that peak period pricing would impose the highest charges when most customers want to use the Internet and would therefore require most end-users, who are not necessarily the heaviest end-users, to reduce consumption or to pay more.

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[6] Subsection 27(2) provides that "No Canadian carrier shall, in relation to the provision of a telecommunications service or the charging of a rate for it, unjustly discriminate or give an undue or unreasonable preference toward any person, including itself, or subject any person to an undue or unreasonable disadvantage."

20. Certain interveners proposed other economic ITMP models and generally submitted that an economic ITMP based on an aggregated usage approach, under which a GAS ISP would pay based on the total usage generated by all its end-users, would permit greater retail pricing flexibility for the GAS ISP. The Bell companies responded that their objective was to ensure proportionate use of the network for all users by applying usage charges for users that consume more than the majority of the users, and that therefore an aggregated usage model would nullify the potential effectiveness of UBB as a means of managing network usage. They also submitted that the ITMP decision required only that the Commission determine whether their proposed rates are just and reasonable.

21. The Commission notes that, under the Bell companies' proposal, rates vary with the amount of usage generated by each end-user of a GAS ISP. The Commission considers that the Bell companies' proposal would incent heavy end-users to reduce their usage, including during peak periods. Accordingly, the Commission concludes that the Bell companies' proposal for wholesale Residence GAS is an economic ITMP.

Equivalent treatment of wholesale GAS and retail services

22. The Commission notes that, in requiring equivalent treatment by cable carriers of their retail and wholesale TPIA customers in Telecom Decision 2006-77, it articulated the appropriate standard to be met by the cable companies to ensure consistency with subsection 27(2) of the Act. The Commission considers it appropriate to also use this requirement to assess the Bell companies' applications.

23. The Commission considers that the record of the proceeding with respect to equivalent treatment raises the six issues addressed below.

i) Should the Bell companies be charging UBB rates to all their retail service customers before their economic ITMP for wholesale GAS is implemented?

24. GAS ISPs generally submitted that implementation of the Bell companies' proposed economic ITMP would not result in equivalent treatment of GAS and retail Internet services. They noted that the Bell companies proposed to implement UBB for all GAS ISP customers in one flash-cut and that, in contrast, the Bell companies have been transitioning their retail Internet service customers to UBB rates for over three years and are not charging all of these customers UBB rates.

25. The Bell companies submitted that flat-rate retail Internet service plans have not been available to their new customers since 2006 and that the number of customers on such plans continues to decrease. The Bell companies therefore submitted that, to the extent there would be any preference of their retail Internet services, it would not be undue.

26. Based on the full record of this proceeding, the Commission considers that the Bell companies' proposed economic ITMP is inconsistent with subsection 27(2) of the Act because it would significantly limit the ability of GAS ISPs to attract retail customers that the Bell companies have chosen not to charge UBB rates. In the Commission's view, the Bell companies' proposed economic ITMP does not provide for equivalent treatment.

27. In light of the above, the Commission concludes that each Bell company may implement its economic ITMP only once it charges UBB rates to all its retail Internet service customers.

ii) What measures, if any, should be established to address equivalent treatment with respect to the waiver of UBB charges following implementation of the economic ITMP?

28. GAS ISPs generally submitted that, if the UBB proposal is approved, the Bell companies could continue to charge UBB rates for GAS while waiving UBB rates for their retail Internet service customers without restriction, given that retail Internet services are not rate regulated. The interveners generally submitted that such a situation would not constitute equivalent treatment.

29. The Bell companies submitted that waiving retail UBB rates for promotional purposes is evidence of a competitive retail market and that GAS ISPs could also waive UBB rates, if they chose to adopt them, for their retail Internet services. The Bell companies added that their proposal does not require GAS ISPs to adopt a UBB retail rate structure and that GAS ISPs can differentiate their services using other means, such as value-added features. GAS ISPs generally submitted that, because UBB rates for GAS would be an explicit cost that they would have to recover for each end-user who exceeds the usage threshold, unlike the Bell companies, they could not afford to waive UBB rates for their end-users.

30. The Commission agrees with the GAS ISPs that they would be subject to a significant disadvantage if the Bell companies chose to waive UBB rates for their retail customers. To address this matter, the Commission considers it necessary to establish a measure to ensure equivalent treatment. Accordingly, the Commission finds that, after each Bell company implements its economic ITMP, to the extent that each company chooses not to charge UBB rates to any existing or new retail customer, it is required to treat GAS ISPs on an equivalent basis.

iii) Should the Bell companies be required to offer an insurance plan to GAS ISPs?

31. The Bell companies provide an insurance plan for their retail Internet services that allows a customer to purchase an additional 40 GB of monthly usage for $5 per month, thus effectively raising the usage threshold. The Bell companies did not propose an insurance plan for wholesale GAS. They submitted that very few customers purchase their plan and that GAS ISPs can provide their own retail insurance plans.

32. GAS ISPs generally submitted that the Bell companies' proposal does not represent equivalent treatment of their wholesale GAS and retail Internet services with regard to insurance plans. Certain GAS ISPs also submitted that they could not afford to offer insurance plans that are comparable to that of the Bell companies, given that they would be required to pay a monthly overage charge of up to $22.50 per end-user.

33. The Commission considers that the Bell companies' failure to provide GAS ISPs with an insurance plan would unduly limit the ability of GAS ISPs to attract retail customers. Accordingly, the Commission concludes that the Bell companies' provision of an insurance plan for their retail Internet service, but not in connection with their economic ITMP for wholesale GAS, would not constitute equivalent treatment.

34. In light of the above, the Commission directs the Bell companies to file with the Commission for approval, within **45 days** of the date of this decision and serving copies on the interveners, an insurance plan for GAS that is equivalent to their insurance plan for retail Internet service.

iv) Should the Bell companies' proposal to charge GAS ISPs for uncorrelated usage be approved?

35. The Bell companies submitted that their proposed approach to implementing and billing UBB for GAS would result in what they referred to as uncorrelated usage, which is usage that a Bell company could not match, or correlate, to a GAS ISP's end-user. The Bell company would charge the GAS ISP for such usage.

36. The Bell companies submitted in their applications that the purpose of the proposed uncorrelated usage charge is to address steps taken by some of their retail customers, either alone or in conjunction with a GAS ISP, to avoid paying UBB rates for the Bell companies' retail Internet services. They added that most, if not all, uncorrelated usage would be due to this avoidance. The Bell companies submitted that such actions cause them retail revenue loss and that the proposed uncorrelated usage charge would permit them to bill GAS ISPs for uncorrelated usage.

37. The Bell companies subsequently acknowledged that uncorrelated usage could also arise in circumstances that are not associated with their retail customers' intention to avoid paying UBB rates for their retail Internet services. They also submitted that, in such circumstances, an additional objective would be to ensure that usage charges are attributed to the GAS ISP that authenticated the end-user's Internet session.

38. Certain GAS ISPs submitted that the proposed uncorrelated usage charge was inequitable. They stated that, since the Bell companies do not provide GAS ISPs with the working telephone number from which an end-user requests approval for a particular Internet session, the GAS ISP could not deny the request from the end-user and thus avoid the usage that the Bell companies proposed to treat as uncorrelated.

39. The Commission notes that the record of this proceeding does not suggest that the Bell companies have experienced, or would experience, uncorrelated usage for their retail Internet services. In contrast, the Bell companies' chosen approach to implementing the UBB component of their proposed economic ITMP for Residence GAS would result in the creation of uncorrelated usage for GAS ISPs, with a corresponding charge. Further, the Commission notes that the Bell companies have failed to show that other implementation approaches would not result in uncorrelated usage. In the circumstances, the Commission concludes that the Bell companies' proposal to bill their economic ITMP on a basis that includes an uncorrelated usage charge for GAS ISPs would not be appropriate and would not result in equivalent treatment.

40. Accordingly, the Commission **denies** the Bell companies' proposal to charge GAS ISPs for uncorrelated usage.

v) Is the Bell companies' proposed approach to traffic measurement appropriate?

41. The Bell companies submitted that some initial packets in the peer-to-peer (P2P) upload transmissions of a GAS ISP's end-user could be double-counted because such packets are dropped, then re-sent, due to peak period shaping of P2P traffic that occurs after a GAS ISP's traffic is measured for billing purposes. They submitted that double-counting cannot occur for non-P2P traffic, P2P download traffic, and traffic generated outside of peak periods. The Bell companies provided information on total dropped traffic for a small sample of their retail Internet service customers and submitted that the percentage of dropped traffic would be very low even for a top P2P uploader on their network.

42. GAS ISPs generally submitted that they should not pay for double-counted traffic.

43. The Commission notes that Bell Canada shapes P2P traffic associated with its retail Internet service. The record indicates that, for billing purposes, the Bell companies measure P2P upload traffic generated by end-users of their retail Internet services in the same way they propose to measure GAS ISP end-users' traffic for billing purposes. The Commission further notes the Bell companies' submission that double-counting of P2P upload traffic will not materially affect GAS ISPs' UBB charges.

44. Accordingly, the Commission concludes that the Bell companies' proposed approach to traffic measurement constitutes equivalent treatment and is appropriate in the circumstances.

vi) Should the Bell companies' proposed excessive usage charge be approved?

45. The Bell companies' proposed economic ITMP would include an excessive usage charge of $0.75 per additional GB of use in excess of 300 GB monthly for a GAS ISP's end-user if, and when, they introduce a corresponding charge of $1.00 per GB of use in excess of 300 GB monthly for their retail customers. Certain GAS ISPs submitted that the Bell companies' application of this wholesale charge would be anti-competitive and could be implemented with virtually no notice of the date of its imposition.

46. The Commission considers that the application of the Bell companies' proposed excessive usage charge for GAS would constitute equivalent treatment of their GAS and retail Internet services if an excessive usage charge of $1.00 per GB of use in excess of 300 GB monthly is introduced for all their retail Internet service customers. The Commission considers, however, that the Bell companies should provide advance notice to GAS customers that this charge will be implemented.

47. The Commission notes that retail Internet services are typically billed on a monthly basis and that GAS ISPs have different billing cycles for these services. The Commission therefore considers that a 60-day notice period would provide GAS ISPs with sufficient time to adjust their charges to end-users, as appropriate.

48. Accordingly, the Commission concludes that the Bell companies' proposed excessive usage charge of $0.75 should be approved, subject to the following requirements:

- each Bell company must provide written notice to its GAS customers and to the Commission of its intention to implement the charge, 60 days in advance of the implementation date; and
- on the implementation date, the excessive usage charge of $1.00 referred to by the Bell companies must also apply to all of the Bell company's retail Internet service customers.

Other Issues

Login identification (ID) of GAS ISPs' end-users on GAS bills

49. Some GAS ISPs submitted that they require their end-user's login ID for each Internet session on the Bell companies' billing statements to reconcile their bills with their own records. The Bell companies submitted that providing this information would involve additional cost, and that GAS ISPs can cross-reference the working telephone numbers provided on their billing statements to the login IDs of their end-users.

50. The Commission considers that, with the implementation of the Bell companies' proposed economic ITMP on the basis of the requirements set out in this decision, GAS ISPs would have sufficient information on their billing statements to reconcile their GAS bills. Accordingly, the Bell companies are not required to provide login IDs on GAS ISPs' bills.

Conclusion

51. In light of the above, the Commission **approves** the Bell companies' proposed economic ITMP (excluding rates), as modified by the requirements set out in this decision.

III. Are the Bell companies' proposed rates just and reasonable?

52. Having approved the Bell companies' proposed economic ITMP, the Commission must consider what rates would be appropriate for the Bell companies' Residence GAS economic ITMP and for the additional Business GAS speed option.

Rates for the Bell companies' proposal for wholesale Residence GAS

53. The Bell companies' economic ITMP for Residence GAS includes a flat-rate component, which covers access and a usage allowance, as well as a UBB component. The Bell companies submitted that rates should reflect market-based pricing.

i) Bell companies' cost estimates for the flat-rate component

54. The Commission notes that under the Bell companies' proposed economic ITMP, they would continue to recover their access costs and all usage costs from the flat-rate component. The Commission has reviewed the Bell companies' cost estimates for the flat-rate component and considers that they should be reduced in three areas: help desk return calls, traffic distribution in peak and off-peak periods, and the use of ATM switches.

Help desk return calls

55. The Bell companies stated that maintenance costs associated with help desk return calls were based on the frequency of such calls and were developed in 2006 according to estimates provided by employees performing this activity. They further stated that once a trouble ticket is opened, the help desk representative may be required to make one or more outgoing calls to the tester, the dispatcher, the originating customer (i.e. the ISP) who opened the trouble ticket, and/or the end-user.

56. The Commission is not persuaded that the Bell companies' assumption regarding the number of help desk return calls is reasonable. The Commission also notes that the record does not indicate that the Bell companies applied a productivity improvement factor to their time estimate associated with help desk return calls for the period between 2006 and the start of the cost study, which was 2009. The Commission considers it reasonable to adjust the costs associated with help desk return calls in order to reflect a lower average number of such calls and to apply to the time estimate the productivity improvement factor of 1.3 percent per year identified in Bell Canada's Appendix V attachment to its Phase II costing manual.

57. In light of the above, the Commission has reduced by 10 percent the Bell companies' maintenance costs associated with help desk return calls.

Peak/off-peak traffic distribution

58. The Bell companies submitted that some GAS costs are driven by bandwidth and are therefore affected by bandwidth requirements during the peak period. They further stated that the estimate of bandwidth required for GAS during the peak period for every 1 GB of average usage, per end-user, per month, was based on Bell Canada's retail Internet service customer data gathered during a three-week period in August 2007.

59. The Commission notes that in the oral hearing leading to the ITMP decision, Bell Canada indicated that 27 percent of its traffic is P2P traffic. The Commission also notes that in the proceeding leading to Telecom Decision 2008-108, Bell Canada indicated that it began shaping peak period retail Internet service P2P traffic in October 2007, and that total P2P peak period traffic had declined by 50 percent as a result. Based on this evidence, the Commission considers it appropriate to reduce the Bell companies' bandwidth costs for the flat-rate component to reflect this change in P2P traffic.

60. Accordingly, the Commission has reduced by 14 percent the Bell companies' GAS capital costs that are driven by bandwidth to reflect the reduction in total peak period P2P traffic, due to their traffic shaping practice.

ATM switches

61. The Bell companies filed switching costs based on the use of ATM switches. The Commission notes that the Bell companies have generally stopped investing in ATM technology and currently relieve congestion by migrating traffic from ATM to Ethernet growth technology. The Commission therefore considers that the use of existing ATM

switches advances Ethernet switches and that the Bell companies' switching costs should be based on the advancement of Ethernet switches rather than the advancement of ATM switches.

62. The Commission notes that the record does not provide information on costs associated with Ethernet switches and that Bell Canada's Appendix V attachment to its Phase II costing manual suggests that the life estimate associated with Ethernet switches is at least as long as the period of the Bell companies' cost study–that is, five years. The Commission considers that newer technologies, such as Ethernet, are generally more efficient than older technologies, such as ATM, and are expected to cost less per unit of capacity. Based on the record of this proceeding, the Commission finds it reasonable to use the ATM switching costs as a proxy for the Ethernet switching costs and to assume that there is no replacement of ATM switches during the study period.

63. Accordingly, the Commission has reduced by 37 percent the Bell companies' capital costs associated with ATM switching hardware.

ii) Bell companies' proposed markups for the flat-rate component

64. The Commission notes that, in Telecom Decision 2008-17, it mandated the continued provision of the Bell companies' wholesale GAS and the cable carriers' wholesale TPIA services.

65. The Commission notes that the Bell companies proposed a rate structure for their economic ITMP that is consistent with the rate structure approved for the cable carriers' TPIA services, in that it has a flat-rate component and a UBB component. However, the proposed markups reflected in the flat-rate component of the Bell companies' economic ITMP, whether determined based on their proposed costs or on adjusted costs, are not comparable to the markups reflected in rates approved for the flat-rate component of the cable carriers' TPIA services.[7]

66. In light of its determinations in Telecom Decision 2008-17 and in accordance with the objective of competitive neutrality, the Commission considers that rates for the flat-rate component of Residence GAS should reflect markups that are comparable to those for TPIA. The Commission also considers that comparable markups for all speed options of the Bell companies' Residence GAS would support retail Internet service competition by providing GAS ISPs with equivalent pricing flexibility for all speed options, thereby increasing their retail pricing flexibility. The Commission notes that this approach is consistent with markups reflected in rates approved across all speed options for the cable carriers' TPIA services.

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[7] The markup included in a rate for a service or service component is the difference between the rate and costs, and is typically expressed as a percentage. Markup levels included in the Bell companies' economic ITMP rates and in the cable carriers' TPIA service rates are confidential, since the costs submitted by the Bell companies in this proceeding and by the cable carriers in past proceedings in support of proposed TPIA service rates have been maintained in confidence.

67. The Commission is therefore of the view that it would be appropriate to approve rates for the flat-rate component of the Bell companies' proposed economic ITMP for Residence GAS that are based on adjusted costs and reflect markups which are comparable to those for the cable carriers' TPIA services.

iii) Bell companies' proposed rates for the UBB component

68. The Commission notes that the UBB rates proposed by the Bell companies for their economic ITMP for Residence GAS are 25 percent lower than their comparable retail UBB rates and, as such, are set in relation to these rates. Consistent with the intended purpose of the Bell companies' economic ITMP, which is to incent heavy end-users to reduce their usage, the Commission considers that the Bell companies' proposed market-based pricing approach is appropriate for the UBB component of their proposal.

69. Accordingly, the Commission considers that the level of the Bell companies' proposed usage thresholds, above which a GAS ISP would pay UBB rates on a per-GB, per-end-user basis up to a maximum of $22.50 per month, are reasonable.

Bell companies' proposed rates for additional wholesale Business GAS speed option

70. The Commission has reviewed the Bell companies' cost estimates for their additional Business GAS speed option. For the reasons set out with respect to the Commission's adjustments to the Bell companies' cost estimates for the flat-rate component of their proposed economic ITMP for Residence GAS, the Commission considers it appropriate to make the same adjustment to costs for the additional Business GAS speed option that are associated with help desk return calls, peak period bandwidth requirements, and the use of ATM switches.

71. The Commission has assessed the rate levels that will result if rates for the additional Business GAS speed option are based on service costs, as adjusted, plus the Bell companies' proposed markup. The Commission considers that these rate levels would provide customers of the additional Business GAS speed option with pricing flexibility at the retail level.

Conclusion

72. Accordingly, the Commission **approves**, as just and reasonable, the rates set out in the Appendix to this decision for the Bell companies' proposed economic ITMP for Residence GAS and for their additional Business GAS speed option. The Bell companies are to issue tariff pages for the additional Business GAS speed option that reflect this determination no later than **15 days** from the date of this decision.

IV. What implementation period would be appropriate?

73. Certain interveners proposed various implementation periods in the event that the Commission approves the Bell companies' proposed economic ITMP. These proposed periods were 3, 6, or 12 months from the date of approval. The Bell companies submitted that GAS ISPs have had adequate notice of their intention to introduce UBB for GAS.

74. The Commission notes that, until the issuance of this decision, GAS ISPs could not know whether the Bell companies' applications would be approved and, if so, what the associated conditions and rates would be. The Commission therefore considers that it would not have been reasonable in advance of this decision for GAS ISPs to determine, for example, whether and how to revise their retail Internet service offerings, incur implementation costs, and notify their end-users.

75. The Commission notes that as a condition of each Bell company's implementation of its proposed economic ITMP for Residence GAS, all of its retail Internet service customers are to be charged UBB rates, and that the date by which this would occur cannot be known in advance. The Commission further notes the implementation condition that each Bell company is to provide an approved insurance plan for Residence GAS equivalent to its plan for retail Internet service.

76. As noted above, retail Internet services are typically billed on a monthly basis. The Commission considers that GAS ISPs must be allowed a reasonable period to examine whether and how to revise their retail Internet service offerings, as well as to make any associated system changes and notify their retail end-users as appropriate.

77. Accordingly, the Commission concludes that the implementation date of each Bell company's economic ITMP will be either the date that all its retail customers are charged UBB rates or six months from the date of this decision, whichever is later, provided that on that date an approved insurance plan for its proposal is available to GAS ISPs. The Bell company must also provide written notice of the implementation date to its GAS ISPs, and to the Commission, at least three months in advance of that date.

78. Each Bell company is to issue tariff pages that reflect the determinations in this decision with respect to the Bell companies' economic ITMP, as well as any Commission determination relating to the approval of an insurance plan, no later than **30 days** prior to the implementation of its economic ITMP.

V. Are the Commission's determinations consistent with the Policy Direction?

79. The Commission considers that its determinations in this decision advance the telecommunications policy objectives set out in paragraphs 7(*b*), (*c*), and (*f*) of the Act.[8] The Commission further considers that its determinations are consistent with the Policy Direction requirements that (a) the measures in question be efficient and proportionate to their purpose and interfere with competitive market forces to the minimum extent necessary to meet the above policy objectives, and (b) the measures neither deter economically efficient competitive entry into the market nor promote economically inefficient entry.

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8 The cited policy objectives of the Act are:

7(*b*) to render reliable and affordable telecommunications services of high quality accessible to Canadians in both urban and rural areas in all regions of Canada;

7(*c*) to enhance the efficiency and competitiveness, at the national and international levels, of Canadian telecommunications; and

7(*f*) to foster increased reliance on market forces for the provision of telecommunications services and to ensure that regulation, where required, is efficient and effective.

80. Finally, the Commission notes the Policy Direction requirement that regulatory measures related to network access regimes, such as wholesale GAS, should ensure the competitive neutrality of those regimes to the greatest extent possible. As noted above, in Telecom Decision 2006-77, the Commission approved UBB for the cable carriers. The Commission considers that approving the Bell companies' proposed economic ITMP, with the changes set out in this decision, will allow the Bell companies to apply UBB on a comparable basis to the cable companies, and that such approval is consistent with the competitive neutrality aspect of the Policy Direction.

81. The dissenting opinion of Commissioner Molnar is attached.

Secretary General

Related documents

- *Applications by Teksavvy Solutions Inc. and MTS Allstream Inc. to review and vary portions of Telecom Order 2009-484 regarding usage-based billing for Bell Aliant Regional Communications, Limited Partnership's and Bell Canada's residential Gateway Access Services,* Telecom Decision CRTC 2009-658, 21 October 2009

- *Review of the Internet traffic management practices of Internet service providers*, Telecom Regulatory Policy CRTC 2009-657, 21 October 2009

- *Bell Aliant Regional Communications, Limited Partnership and Bell Canada – Applications to introduce usage-based billing and other changes to Gateway Access Services,* Telecom Order CRTC 2009-484, 12 August 2009

- *Cybersurf's application related to the implementation of Telecom Decision 2008-117 regarding the matching speed requirement*, Telecom Order CRTC 2009-111, 3 March 2009

- *Cybersurf Corp.'s application related to matching service speed requirements for wholesale Internet services,* Telecom Decision CRTC 2008-117, 11 December 2008

- *The Canadian Association of Internet Providers' application regarding Bell Canada's traffic shaping of its wholesale Gateway Access Service*, Telecom Decision CRTC 2008-108, 20 November 2008

- *Revised regulatory framework for wholesale services and definition of essential service,* Telecom Decision CRTC 2008-17, 3 March 2008

- *Cogeco, Rogers, Shaw, and Videotron – Third-party Internet access service rates*, Telecom Decision CRTC 2006-77, 21 December 2006

Appendix

Approved rates for the Bell companies' economic ITMP for Residence GAS

Flat-rate component by speed option

Lite – Up to 512 Kbps downstream

GAS flat-rate	Contract period Monthly rate		
	1 year	*2 years*	*3 years*
<500	$13.15	$12.65	$12.15
500 - 1000	$12.65	$12.15	$11.65
>1000	$12.15	$11.65	$11.15

Lite Plus – Up to 2 Mbps downstream

GAS flat-rate	Contract period Monthly rate		
	1 year	*2 years*	*3 years*
<1000	$16.40	$15.90	$15.40
1000 - 2500	$15.90	$15.40	$14.90
2501 - 5000	$15.40	$14.90	$14.40
5001 - 7500	$14.90	$14.40	$13.90
>7500	$14.40	$13.90	$13.40

Basic – Up to 5 Mbps downstream

GAS flat-rate	Contract period Monthly rate		
	1 year	*2 years*	*3 years*
<1000	$21.20	$20.70	$20.20
1000 - 2500	$20.70	$20.20	$19.70
2501 - 5000	$20.20	$19.70	$19.20
5001 - 7500	$19.70	$19.20	$18.70
>7500	$19.20	$18.70	$18.20

UBB component by speed option

GAS flat-rate Residence, each	Monthly usage allowance	Usage charge per additional GB, per month	Maximum usage charge per month	Excessive usage charge per additional GB in excess of 300 GB
Lite	2 GB	$1.875	$22.50	$0.75
Lite Plus	20 GB	$1.50	$22.50	$0.75
Basic	60 GB	$1.125	$22.50	$0.75

Appendix

Approved rates for the Bell companies' additional Business GAS speed option

Lite Plus – Up to 1 Mbps downstream

GAS access	Contract period Monthly rate		
	1 year	*2 years*	*3 years*
<1000	$27.45	$26.45	$25.45
1000 - 2500	$26.45	$25.45	$24.45
2501 - 5000	$25.45	$24.45	$23.45
5001 - 7500	$24.45	$23.45	$22.45
>7500	$23.45	$22.45	$21.45

Dissenting opinion of Commissioner Candice Molnar

Usage-based pricing is a rating concept that is firmly established within Canada's Internet services market. It has formed part of cable company pricing strategies for years, and applies to both retail and wholesale services. It is used by fixed and mobile wireless carriers, and by many competitive Internet service providers (ISPs). It is also the retail pricing strategy adopted by Bell Canada and Bell Aliant Regional Communications, Limited Partnership (collectively, the Bell companies) more than three years ago.

In my view, it is appropriate that usage-based pricing, or usage-based billing (UBB) as it is referred to in this decision, also apply to the Bell companies' respective wholesale Gateway Access Services (GAS) in order to improve competitive equity with the cable companies' third-party Internet access (TPIA) service, to improve equity between the Bell companies' respective wholesale and retail services, and to allow the Bell companies to more effectively manage Internet traffic requirements within their networks.

I would note that I am not convinced that the Bell companies' proposal to apply UBB charges based upon end-customer usage is the most effective Internet traffic management practice (ITMP) approach. Nor am I persuaded at this time that an aggregated usage model, if properly structured, would nullify the potential effectiveness of UBB as a means of managing network usage. Certainly, an aggregated usage model would have provided ISPs that subscribe to the Bell companies' GAS (GAS ISPs) with greater flexibility to manage end-user pricing/service solutions.

Regardless of whether the Bell companies' proposal is the most effective ITMP approach, I agree with the majority's decision to approve Tariff Notices 242 and 7181, subject to certain modifications and conditions. However, I disagree with the majority in regard to which modifications and conditions are appropriate. Specifically, my dissent is focussed on the following three issues:

- *Should the Bell companies be charging UBB rates to all their retail service customers before their economic ITMP for wholesale GAS is implemented?*
- *What measures, if any, should be established to address equivalent treatment with respect to the waiver of UBB charges following implementation of the economic ITMP?*
- *Bell companies' proposed markups for the flat-rate component*

Should the Bell companies be charging UBB rates to all their retail service customers before their economic ITMP for wholesale GAS is implemented?

The majority has determined that each Bell company may implement its economic ITMP only once it charges UBB rates to all its retail Internet service customers. Anything less than full adoption of UBB by retail customers would not constitute "equivalent treatment" of wholesale and retail services, and thus is contrary to subsection 27(2) of the *Telecommunications Act*.

But there is not equivalent treatment today. The Bell companies apply usage-based pricing constraints to the vast majority of their retail Internet customers, and have for years. In contrast, no similar usage constraints are applied to any end-users of GAS ISPs. The decision of the majority will perpetuate this inequity.

The Bell companies have discontinued unlimited usage plans and the evidence filed by these companies indicates that the number of customers on unlimited usage plans is small and declining. Given their traffic management practices and retail pricing strategy, there is a clear incentive for the Bell companies to migrate the remainder of their customer base to usage-based pricing as quickly as is feasible.

Introducing a UBB component to the Bell companies' GAS tariffs while a limited number of their retail customers remain on grandfathered pricing plans does not, in my view, constitute a breach of subsection 27(2). Moreover, while these customers may be less attractive to GAS ISPs, there is no reason that such ISPs could not attract them to their services. ISPs compete on more service attributes than simply price. And unlike the retail Internet pricing restriction that the majority has imposed on the Bell companies, there is nothing that would prohibit a GAS ISP from offering an unlimited plan to select customers. As illustrated below, there is a significant margin between retail and GAS prices, a margin which has increased based upon the decision of the majority.[9]

Table 1
Illustrated Comparison of Retail and GAS Rates
Bell (Ontario)

	Retail		**Wholesale**	
	Rate	Usage Allowance	Rate	Usage Allowance
5 Mbps – flat rate[10]	$31.95 – $39.95	25 GB	$18.20 – 21.20	60 GB
usage max	$30		$22.50	
Total	$61.95 – $69.95	40 GB	$40.70 – $43.70	80 GB

In my view, the condition that the Bell companies must migrate all their respective retail customers to UBB before they can implement changes to their GAS tariffs is unnecessary. It is also contrary to Policy Direction 2006-1534 in three important respects.

Firstly, the Policy Direction requires the Commission to use measures that are "efficient and proportionate to their purpose and that interfere with the operation of competitive market forces to the minimum extent necessary to meet the policy objectives." By requiring that all retail customers of a given Bell company be on usage-based pricing plans before that company is permitted to introduce UBB for GAS, the majority has essentially imposed pricing conditions on forborne retail services. Such action interferes with competitive market forces.

9 Recognizing that GAS differs from retail Internet service, and that GAS ISPs incur additional costs to provision and supply retail Internet.

10 Bell (Ontario) retail service at 6 Mbps

Secondly, the majority’s decision has delayed the introduction of GAS UBB, thus perpetuating the competitive inequity that exists between the traffic management practices imposed on end-user traffic generated by wholesale versus retail customers – contrary to the Policy Direction requirement that measures “neither deter economically efficient competitive entry into the market nor promote economically inefficient entry.”

Thirdly but no less importantly, the requirement that all retail customers must be on usage-based plans was never imposed on cable carriers. Despite the fact that the majority deemed it appropriate to assess the Bell companies’ applications using the standard established for the cable companies, the outcomes of these assessments are markedly different. The Policy Direction requires that, to the greatest extent possible, measures be “implemented in a symmetrical and competitively neutral manner.” No justification is provided, nor is one apparent, for the different conditions imposed on the Bell companies versus those imposed on the cable carriers.

What measures, if any, should be established to address equivalent treatment with respect to the waiver of UBB charges following implementation of the economic ITMP?

The majority has decided that if a Bell company waives UBB charges for any new or existing retail customer, it is required to treat GAS ISPs on an equivalent basis.

The waiver of fees on a promotional or conditional basis is a fundamental marketing strategy in the retail services market. That the Bell companies must either stop this practice or extend such promotional opportunities to GAS ISPs is unwarranted. Promotions are a cost of customer acquisition rightly borne by the service provider. As evidenced by the comparison of retail versus GAS rates in Table 1, GAS ISPs have a significant margin within which to operate and promote their services. GAS rates per end-user are approximately 50 percent lower than comparable retail rates.

The GAS UBB charge is more than an economic ITMP to be measured against a standard of “equivalent treatment.” It is an integrated component of the total charge per GAS ISP end-user. What’s more, GAS is a non-essential service. The condition imposed by the majority appears neither just nor reasonable.

A Bell company who chooses to waive the flat-rate fee for its retail Internet customers is not required to similarly waive the flat-rate fee for its GAS customers. Why then will it be required to waive the UBB component of the GAS ISPs’ end-user charge?

And what perverse impacts will this have on the Bell companies’ retail marketing strategies? If the Bell companies cannot waive UBB charges, can they provide/move customers to higher speeds and usage levels on a promotional basis? Can they offer free Internet service on a promotional basis? Following the logic of the majority’s decision, it would appear contrary to subsection 27(2) for the Bell companies to provide new or existing retail Internet customers with virtually any promotions, unless those promotions are made equally available to GAS ISPs.

As with the requirement that all retail customers must be on UBB plans, I submit that the decision of the majority regarding the waiver of fees unduly interferes with market forces, contrary to Policy Direction 2006-1534. Also contrary to the Policy Direction, it is another condition that was never imposed on cable carriers.

Bell companies' proposed markups for the flat-rate component

GAS is a mandated, non-essential service. As such, rates are determined on a case-by-case basis. In the case of Tariff Notices 242 and 7181, the majority determined that a market-based pricing approach was reasonable for the purpose of establishing GAS UBB rates. A market-based pricing approach was also, in essence, deemed reasonable for the purpose of establishing the rates of the fixed-line component of the new business GAS speed option. However, the majority departed from this market-based pricing approach in the case of the residential flat-rate component. Instead the majority fixed the rates at cost plus a mandated markup.

I have two concerns with the decision of the majority. Firstly, if a market-based pricing approach is appropriate for the residential UBB component of the GAS tariff and for the business flat-rate component of the GAS tariff, why is it not equally appropriate for the residential flat-rate component? It cannot be that residential services are less competitive than business, and certainly not at the wholesale level.

Secondly, the mandated markup approved by the majority was based upon the markup that had been proposed by the cable companies and accepted by the Commission[11] as appropriate for TPIA service. The record of this proceeding does not include parties' comments on the appropriateness of imposing a fixed markup for all speed options. I note it is a departure from the Bell companies' tariff proposals as well the companies' current GAS pricing approach.

Moreover, there is nothing on the record of this proceeding to support the level of markup imposed by this decision. The majority has determined that the level of markup should be comparable to that approved for the cable companies, for reasons of competitive equity. While I support the principle of competitive equity, it is not clear that it has been achieved in this situation. We know there are differences in the underlying technology, service descriptions/terms and conditions, as well as the costing methodology used to determine costs and thus markups. We also know there are different obligations as regards waiver of fees for wholesale customers. We do not know if these differences support a same or different markup.

Ultimately, the underlying issue is consumer choice. Consumers are best served by a vibrantly competitive market at both the retail and wholesale levels. In my view, the decision of the majority does not serve that aspiration. Instead, it creates and/or perpetuates competitive inequities at the wholesale level, and places restrictions on forborne retail marketing activities that could ultimately impact the degree of service differentiation and pricing innovation within the retail market.

[11] See Order CRTC 2000-789 and Telecom Decision CRTC 2006-77.