Canadian Radio-television and Telecommunications Commission
Conseil de la radiodiffusion et des télécommunications canadiennes

Telecom Decision CRTC 2011-24

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Bell Aliant Regional Communications, Limited Partnership and Bell Canada – Monthly recurring rates and service charge rates for unbundled loops in Ontario and Quebec

File numbers: 8740-B2-200908569 and 8740-B54-200908543

In this decision, the Commission approves revised monthly recurring rates and service charge rates for wholesale unbundled loops in Bell Aliant's and Bell Canada's incumbent operating territories in Ontario and Quebec.

Introduction

1. The Commission received applications[1] by Bell Aliant Regional Communications, Limited Partnership (Bell Aliant) and Bell Canada (collectively, the Bell companies), dated 2 June 2009, proposing changes to each company's Access Services Tariff item 105 – Local Network Interconnection and Component Unbundling, as well as to each company's General Tariff items 5410 – Gateway Access Service (GAS) and 5420 – High Speed Access Service (HSA).

2. In their applications, the Bell companies proposed to revise their monthly recurring rates for Type A unbundled loops[2] throughout their incumbent operating territories in Ontario and Quebec, except for Bell Aliant's monthly recurring rate in Rate Band G. They also proposed to revise service charge rates for Type A and Type B unbundled loops[3] within the above-mentioned operating territories, including those within Bell Aliant's Rate Band G.

3. The Bell companies requested that the existing rates for unbundled loops be made interim, with final rates to be adjusted retroactively. In addition, the Bell companies proposed to modify their respective GAS and HSA tariffs to explicitly specify the monthly recurring rates and service charge rates for dry loops.[4] The Commission made the existing rates interim and approved the Bell companies' proposed modifications to their GAS and HSA tariffs for dry loops in Telecom Order 2009-775.

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1 These applications were submitted as Bell Aliant Tariff Notice 269 and Bell Canada Tariff Notice 7205.
2 A Type A unbundled loop is an analogue transmission path that supports the transmission of voice-grade signals between a customer's premises and a central office (CO).
3 A Type B unbundled loop is a transmission path that supports the transmission of Integrated Services Digital Network (ISDN) Base Rate Interface (BRI)-type signals between a customer's premises and a CO.
4 A dry loop is an unbundled local loop that is not used to provide primary exchange service.

4. The Commission received comments from Distributel Communications Limited (Distributel); Execulink Telecom Inc., in conjunction with Bruce Telecom, CoopTel, Huron Telecommunications Co-operative Limited, Mornington Communications Co-operative Limited, Nexicom Telecommunications Inc., NRTC Communications, Ontera, Sogetel inc., Tuckersmith Communications Co-operative Limited, Wightman Communications Ltd., and WTC Communications (collectively, Execulink et al.); Globility Communications Corporation; MTS Allstream Inc. (MTS Allstream); Primus Telecommunications Canada Inc. (Primus); TekSavvy Solutions Inc. (TekSavvy); and TELUS Communications Company (TCC).

5. The public record of this proceeding, which closed on 13 September 2010, is available on the Commission's website at www.crtc.gc.ca under "Public Proceedings" or by using the file numbers provided above.

Background

6. Telecom Decision 97-8 required incumbent local exchange carriers (ILECs) to unbundle their local access facilities and make these facilities available on a wholesale basis to competitive local exchange carriers (CLECs). These unbundled local access facilities are referred to as "unbundled loops" and are used by CLECs to provide telecommunications services.

7. Unbundled loops provide connections between individual customer premises and ILEC central offices (COs). ILECs generally provision unbundled loops using either copper cables between the CO and the customer's premises (all-copper loops),[5] or a combination of copper and fibre cables between those locations, with an outside plant remote as the connecting point (hybrid copper-remote loops).[6]

Issues

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

   I. Should the Commission consider the potential effects on the total subsidy requirement (TSR) when determining the final unbundled loop rates?
   II. Are the proposed monthly recurring costs appropriate?
   III. Are the proposed service charge costs appropriate?
   IV. What monthly recurring rates and service charge rates are just and reasonable?
   V. Should the revised rates be applied on a retroactive basis?
   VI. Are the Commission's determinations consistent with the Policy Direction?

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[5] All-copper loops use one copper pair from the ILEC's copper distribution cables and one copper pair from the ILEC's copper feeder cables. The copper distribution cables provide the connections between the customer premises and the copper feeder cables. The copper feeder cables provide the connections between the copper distribution cables and the ILEC COs.

[6] Hybrid copper-remote loops use one copper pair from the ILEC's copper distribution cables and a voice channel from the ILEC's outside plant remotes. The copper distribution cables provide the connections between the customer premises and the remotes. The fibre feeder cables provide the connections between the remotes and the ILEC COs.

I. Should the Commission consider the potential effects on the TSR when determining the final unbundled loop rates?

9. Execulink et al. submitted that the Commission should not consider the Bell companies' proposed unbundled loop rates without considering the corresponding effect on the TSR.[7]

10. Primus submitted that the increases to the TSR that would be required as a result of approving the Bell companies' proposed unbundled loop rate increases would be substantial. It also submitted that under this scenario, all industry participants would have to divert funds to the National Contribution Fund from activities such as research and development, introduction of new services, and network investment.

11. The Bell companies submitted that their proposals addressed only the monthly recurring rates and service charge rates for unbundled loops and not the rates of any retail service that might use such loops. They noted that the existing subsidy regime is being reviewed in the Telecom Notice of Consultation 2010-43 proceeding and, therefore, it was unclear what changes, if any, would be made to the approach used to determine the subsidy requirement at the end of that proceeding.

12. The Commission notes that, as identified in the ILECs' Regulatory Economic Studies Manuals, regulatory economic studies filed in support of each ILEC's TSR are to be developed independently of regulatory economic studies filed in support of that ILEC's retail or wholesale service tariff applications.

13. The Commission also notes that in Telecom Decision 2008-17, it determined that the unbundled loop service would continue to be mandated and would be priced based on prospective incremental costs plus a 15 percent markup. The Commission further notes that it last reviewed costs and associated rates for this service in the proceedings leading to Decision 2001-238 and Telecom Decision 2002-11.

14. Given the time that has elapsed since these decisions were issued, the Commission considers it appropriate to review the wholesale unbundled loop rates in light of the proposed revised prospective incremental costs and based on the pricing principles set out in Telecom Decision 2008-17.

15. The Commission notes that the TSR is currently being reviewed as part of the Telecom Notice of Consultation 2010-43 proceeding. In the Commission's view, consideration of the TSR is beyond the scope of the present proceeding. The Commission considers, therefore, that it would be inappropriate, and inconsistent with the applicable pricing principles, to consider the TSR as a relevant factor in determining the costs and setting the rates for the wholesale unbundled loop service.

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[7] The total subsidy requirement represents the shortfall between costs and the price that ILECs charge for residential primary exchange service in high-cost serving areas. It is funded from the National Contribution Fund.

16. The Commission further notes that the costing determinations in this decision are based on the evidence filed in this proceeding and are specific to the Bell companies' wholesale unbundled loop services. As such, any proposal to use these costing determinations to assess residential primary exchange service costs for the purpose of calculating the TSR would be subject to a public proceeding.

II. Are the proposed monthly recurring costs appropriate?

17. The Commission has identified the following costing issues related to the proposed monthly recurring rates:

    a) What is the appropriate costing methodology to assess the prospective incremental capital costs associated with the use of existing copper cable plant?
    b) If the net book value (NBV) costing approach is adopted, are any adjustments required?
    c) Should the Commission direct the Bell companies to provision new CO terminals in order to provide unbundled loops to competitors?
    d) Are the Bell companies' other proposed cost inclusions appropriate?

a) What is the appropriate costing methodology to assess the prospective incremental capital costs associated with the use of existing copper cable plant?

18. In the Bell companies' Regulatory Economic Studies Manuals (the Bell companies' manuals), the incremental capital cost of a service is generally estimated based on the purchase price of additional facilities used by the service at "cost new"[8] (replacement cost new). The Commission used this costing approach to establish the incremental capital costs of copper cable plant for unbundled loops in Decision 2001-238.

Positions of parties

19. The Bell companies and TCC submitted that replacement cost new is the correct approach to develop the cost for existing copper cable plant. The Bell companies submitted that

    - it is possible to duplicate the ILECs' local access network, noting that alternative telecommunications service providers (ATSPs) in Canada, excluding incumbents operating out-of-territory, served 3.5 million customers on their own access facilities; and

    - the price based on replacement cost new would send the proper economic signal to encourage competitors to build their own access facilities because competitors would likely build the copper cable plant if leasing the loops was at least as costly as building them.

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[8] The cost new of a facility reflects the amount of capital expenditures required to buy and install a new facility.

20. The Bell companies also submitted that using other cost measures, such as NBV[9] or net salvage value,[10] would not send the correct price signals for competitors to make decisions about whether to lease or build. They further submitted that pricing using replacement cost new is consistent with the Policy Direction[11] requirements that the Commission use regulatory measures that "interfere with the operation of competitive market forces to the minimum extent necessary" and that "neither deter economically efficient competitive entry into the market nor promote economically inefficient entry."

21. MTS Allstream questioned the need to send price signals that address the lease-versus-build decisions of competitors because CLECs cannot economically duplicate the loop facilities due to the high cost of building them for the small number of customers they serve in any given area. It submitted that the capital cost associated with the use of existing copper cable plant is the deferred net salvage value because no incremental capital is required to serve forecasted demand in light of excess capacity in the Bell companies' copper cable plant.

22. Distributel, Primus, and TekSavvy submitted, similarly, that the existing copper cable plant is a non-fungible[12] discrete facility[13] and, therefore, according to the Bell companies' manuals, net salvage value should be used as the cost for this facility.

23. Primus also submitted that due to significant removal costs, it was likely that the Bell companies would sell their copper cable plant in place rather than remove it. Primus further submitted that NBV has the advantage of approximating the market value of the copper cable distribution plant when it is disposed of in the above-described manner and that NBV has the advantage of being verifiable.

Commission's analysis and determinations

24. The Commission does not accept the assumption in the lease-versus-build analysis cited by the Bell companies and TCC that competitors are able to economically duplicate the unbundled loop facilities. As the Commission noted in Telecom Decision 2008-17, while the cable companies were competitors to the ILECs in the retail voice telephony market, there were no wholesale alternatives to the ILECs'

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9 Net book value is the original cost of an asset or asset class, minus the associated depreciation.

10 Net salvage value assumes the company could dispose of the asset and typically represents proceeds from disposing of the asset outside of the company net of any applicable removal costs. This value can be assessed in a number of ways – for example, at junk value (when it is removed for scrap) or at market value.

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

12 A facility is fungible if it can be used by the company to provision other services.

13 A discrete facility is one that is wholly attributable to a service or a unit of demand and is not shared among services or units of demand.

unbundled loops. In that decision, the Commission considered that there was no evidence that a reasonably efficient competitor – other than a cable company – had any viable alternative to the ILECs' unbundled loops for offering wireline residential local exchange services to its customers. The Commission further notes that the majority of the customers provisioned on the ATSPs' own facilities are served by cable companies, using the cable companies' coaxial cables.

25. The Commission notes that the Bell companies acknowledged in this proceeding that there is abundant spare capacity in their copper cable plant and that the total demand for unbundled loops is declining in each of Rate Bands A through F of their incumbent operating territories in Ontario and Quebec.

26. The Commission also notes that the Bell companies submitted that they provision their copper distribution cables[14] for ultimate demand – that is, to meet the expected maximum demand for loops in a given serving area. Regarding copper feeder cables,[15] the Commission considers that the Bell companies did not provide evidence to demonstrate that new copper feeder cables are being installed to expand the existing copper feeder cable plant.

27. Accordingly, the Commission considers that using the Bell companies' existing copper cable plant to provide unbundled loop service would not cause the Bell companies to purchase additional copper cables to meet demand for that service.

28. The Commission notes that the Bell companies' manuals prescribe that where using a facility does not cause the purchase of a new facility, forgone net salvage value is used to determine the prospective incremental costs associated with using the facility. The Commission also notes that forgone net salvage value assumes that the company could dispose of the asset and typically represents proceeds from disposing of the asset outside of the company.

29. However, the Commission agrees with the view that, given the significant costs of removal, it is likely that the Bell companies would sell their copper cable plant in place at market value rather than remove it. Therefore, the Commission considers that it is appropriate to assess the forgone net salvage value of the existing copper cable plant based on market value. The Commission considers that NBV, which assesses the remaining value of a given asset, provides a practical and reasonable assessment of the market value associated with the sale of existing copper cable plant.

30. Accordingly, the Commission determines that the forgone net salvage value, as proxied by the copper cable NBVs, provides an appropriate assessment of the prospective incremental capital costs associated with the Bell companies' use of their existing copper cable plant to provide the unbundled loop service (the NBV costing approach).

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[14] Copper distribution cables provide the connections between the customer premises and the copper feeder cables.

[15] Copper feeder cables provide the connections between the copper distribution cables and the ILEC COs.

31. The Commission notes that in this proceeding, the Bell companies provided estimates of 2008 copper cable NBVs by rate band. The Commission further notes that these NBV estimates were derived by apportioning the year-end 2008 total corporate copper cable NBVs using per-rate-band copper cable pair-metre information.[16] The Commission considers this proposed approach to estimate the copper cable NBVs by rate band to be appropriate.

32. The Commission notes that under the NBV costing approach, the unbundled loop rates are not set to recover costs associated with purchasing additional copper cables to meet new CLEC demand. Consistent with this approach, the Commission considers that it is appropriate not to require the Bell companies to provide unbundled loops to CLECs if to do so would require them to purchase additional copper cables to meet the CLECs' requests for such loops.

b) If the NBV costing approach is adopted, are any adjustments required?

33. The Bell companies submitted that if the Commission were to use the NBV costing approach to estimate the copper cable capital cost, the following adjustments would be required:

    i. the life estimates applied to the copper cable NBVs should reflect the values of the average remaining life (ARL) estimates of the copper cable assets and not the economic life estimates for new copper cables;

    ii. the percentage of in-service hybrid copper-remote loops should be used instead of the percentage of hybrid copper-remote loops based on growth deployments; and

    iii. inflation and productivity improvement input factors should not apply to copper cable NBVs.

i. Life estimates to be applied to the copper cable NBVs

34. The Bell companies submitted that if the NBV costing approach were used to determine the costs for existing copper cable plant, ARL estimates[17] should be used in the cost studies.

35. Primus submitted that while there was merit in using ARL estimates, the Bell companies' proposed estimates were unreasonably low and existing copper cable plant lasts longer than their proposed estimates.

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16 Information regarding copper cable pair-metres is set out by wire centre and by copper cable type (i.e. aerial, buried, underground, submarine, and building). The Bell companies extracted this information from their Integrated Mapping, Accounting and Provisioning (IMAP) database.

17 The average remaining life reflects the average remaining useful life of an existing asset or asset class.

36. The Commission considers that for new copper cables, economic life estimates[18] would provide the appropriate estimate for the useful life of the copper cables. However, in the case of existing copper cables, these cables have already been used to provide services for a number of years. The remaining useful lives of the cables will therefore be shorter than the economic life estimates. Accordingly, the Commission determines that it is appropriate to use ARL estimates instead of economic life estimates to assess the useful life of copper cable NBVs.

37. The Commission notes that the record of this proceeding references two different ARL estimates – those the Bell companies proposed in their cost studies and those from their 2005 Depreciation Studies.[19]

38. The Commission considers that in using the 2008 copper cable NBVs to assess the costs for copper cable plant, it would be appropriate to apply ARL estimates that are supported by depreciation studies, and for the year 2008. However, when asked for such studies in this proceeding, the Bell companies indicated that the proposed ARL estimates were not substantiated by depreciation studies and that they did not have copper cable depreciation studies more recent than 2005.

39. Accordingly, the Commission determines that, in the absence of 2008 ARL estimates substantiated by depreciation studies, it would be appropriate to use the Bell companies' 2005 ARL estimates to assess the useful lives of the 2008 copper cable NBVs.

ii. Percentage of hybrid copper-remote loops to be used in the cost studies

40. The Bell companies submitted that to be consistent with the use of historical copper cable NBVs, the cost studies would need to be modified to reflect the percentages of all-copper and hybrid copper-remote loops based on in-service rather than growth deployments.[20]

41. The Commission agrees with the Bell companies that using percentages of all-copper and hybrid copper-remote loops based on growth deployments in the cost studies would be inconsistent with using historical copper cable NBVs.

42. Accordingly, the Commission determines that it is appropriate to use the percentages of in-service all-copper and hybrid copper-remote loops to develop the unbundled loop costs under the NBV costing approach.

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18 The economic life reflects the average useful life of a new asset.

19 The copper cable ARLs from the Bell companies' 2005 Depreciation Studies are as follows: 5.9 years for aerial copper cables, 5.0 years for underground copper cables, 6.0 years for buried copper cables, 6.0 years for submarine copper cables, and 5.9 years for building copper cables.

20 The percentage of hybrid copper-remote loops based on growth deployments reflects the forward-looking proportion of new installations that use a combination of copper and fibre cables, along with an outside plant remote.

iii. Application of inflation and productivity improvement input factors to copper cable NBVs

43. The Bell companies submitted that if revised rates were developed based on the copper cable NBVs, inflation and productivity improvement input factors should not apply to the copper cable NBVs because these NBVs reflect historical values.

44. The Commission agrees with the Bell companies' position that because copper cable NBVs reflect historical values, the annual inflation and productivity improvement input factors should not be applied to copper cable NBVs.

45. Regarding the remaining cost components in the cost studies, the Commission considers that, consistent with current practice[21] and the previous unbundled loop cost studies, it would be appropriate to include annual inflation and productivity improvement input factors in the current cost studies.

46. Accordingly, the Commission determines that it is appropriate to adjust the Bell companies' unbundled loop cost studies by applying inflation and productivity improvement input factors to all cost components except the copper cable NBVs. Given that the effects of inflation and productivity improvements have been reflected in the adjusted costs, the resulting monthly recurring loop rates are exempt from the application of the annual price cap I-X adjustment,[22] consistent with current practice.

c) Should the Commission direct the Bell companies to provision new CO terminals in order to provide unbundled loops to competitors?

47. ILECs must install CO terminals in their COs in order to make hybrid copper-remote loops available to CLECs on an unbundled basis. These terminals provide the necessary interface between hybrid copper-remote loops and the CLEC co-location space.

48. Primus submitted that the Bell companies should be required to provision new CO terminals to make hybrid copper-remote loops available to competitors.

49. The Bell companies submitted that they had been provisioning CO terminals in the past but had stopped doing so as of 2006. They also submitted that they would have to spend significant capital expenditures to provision new CO terminals. They noted

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[21] Cost-based wholesale service rates are approved based on cost studies that either exclude or include inflation and productivity improvement input factors. For wholesale service rates that are determined based on cost studies that exclude these factors, rates are revised on an annual basis by applying the price cap I-X [inflation (I) less productivity offset (X)] adjustment. For wholesale service rates that are determined based on cost studies that include these factors, rates are exempt from the application of the annual price cap I-X adjustment. The inflation and productivity improvement input factors used in an ILEC's cost study are documented in that ILEC's Regulatory Economic Studies Manual.

[22] The I-X adjustment reflects the expected inflation less productivity offset applicable to wholesale services. See footnote 21.

that they were often able to provide all-copper loops to CLECs by migrating their own customers from all-copper loops to hybrid copper-remote loops. The Bell companies further submitted that their practice of not deploying new CO terminals has not been an issue given the minimum number of cases where an unbundled loop could not be provided to CLECs. They indicated that if this situation changed, they would be willing to negotiate with CLECs to resolve the issue.

50. The Commission notes that CO terminals are used only to make hybrid copper-remote loops available to CLECs and that the Bell companies acknowledged that demand for unbundled loops has been declining in Rate Bands A through F of their incumbent operating territories. The Commission considers that, in light of the declining demand for unbundled loop service, the high cost to provision new CO terminals, and the Bell companies' activities to minimize the number of unfulfilled CLEC unbundled loop requests, it would not be appropriate to require the Bell companies to provision new CO terminals.

51. Accordingly, the Commission determines that the Bell companies should not be required to provision new CO terminals in order to make hybrid copper-remote loops available to CLECs.

52. The Commission notes that this determination is consistent with its determination to set rates based on the NBV costing approach, where the Bell companies do not have to provide unbundled loops to CLECs if they must incur additional copper cable capital expenditures to meet the CLECs' requests for such loops.

d) Are the Bell companies' other proposed cost inclusions appropriate?

53. The following table briefly describes the Commission's adjustments to the Bell companies' other proposed costs and provides the rationale for each adjustment. The Commission's determinations on these issues account for less than 10 percent of the effect of all adjustments to the Bell companies' proposed costs.

Proposal	Commission adjustment	Rationale for adjustment
Estimate remote costs using both combo cards and voice-only cards to provision local services.	Removed additional costs associated with the use of combo cards.	Combo cards are provisioned in remotes to provide both digital subscriber line (DSL) and voice services. Including additional costs for combo cards inappropriately shifts some of the costs associated with DSL services to the unbundled loop service.
Estimate capital costs including Ontario provincial sales tax (OPST).	Removed OPST from capital cost (other than for copper cable NBVs).	The Bell companies receive input tax credits for OPST paid on equipment purchased after the implementation of harmonized sales tax in Ontario.

Proposal	Commission adjustment	Rationale for adjustment
Estimate unbundled loop copper cable maintenance expenses by assigning 7.08% of total copper cable maintenance expenses to DSL services.	Assigned 8.7% instead of 7.08% of total copper cable maintenance expenses to DSL services to reflect the view that the DSL trouble ticket repair time takes 25% more time than the voice trouble ticket repair time.	The Bell companies' estimate of 7.08% is based on the assumption that a DSL trouble ticket takes the same amount of repair time as a voice trouble ticket. DSL trouble tickets generally require additional activities to be performed on copper cables compared to voice trouble tickets.
Include all Handling Non-Billing Inquiries – Consumer[23] expenses when estimating costs.	Adjusted the Handling Non-Billing Inquiries – Consumer expense estimate downward to reflect the view that 50% of these activities are related to retail services.	Some Handling Non-Billing Inquiries – Consumer activities, such as responding to customers' service questions, are retail activities unrelated to unbundled loop service.
Include all Provisioning Transport[24] expenses when estimating costs.	Removed all Provisioning Transport expenses.	Provisioning Transport activities are generally not related to unbundled loop service. The portion of Provisioning Transport expenses associated with wireless licence fees was identified as related to unbundled loop service, but these licence fees were also included as a separate expense item in the unbundled loop cost studies.
Include all Order Fulfillment – Technical Support[25] expenses when estimating costs.	Adjusted the Order Fulfilment – Technical Support expense estimates downward to reflect the view that 50% of the expenses are not related to unbundled loop service.	Two of the major functions identified for this category of expenses – Marketing activities and Internet Service Provider (ISP) Installation Help Desk – are retail functions that are not related to the unbundled loop service.

[23] Handling Non-Billing Inquiries – Consumer activities are those related to receiving customer requests or questions regarding services.

[24] Provisioning Transport activities are those related to provisioning the transport component of the network that interconnects central offices.

[25] Order Fulfillment – Technical Support activities are those related to engineering technical support provided for Marketing, Plant, and Engineering activities, and for Internet Service Provider (ISP) Installation Help Desk.

Proposal	Commission adjustment	Rationale for adjustment
Include NBVs of all copper cable plant when estimating costs.	Adjusted NBVs downward to remove the NBVs associated with non-access-related copper cables. Further adjusted the copper distribution cable NBVs downward to reflect the view that 3% of copper distribution cable NBVs in each of Rate Bands A through D are not available for the loop service.	Non-access-related copper cables are not used to provision the unbundled loop service. A portion of copper distribution cables that are used for the fibre-to-the-node (FTTN)[26] network are not used to provide the loop service and, therefore, are not part of the cost of providing unbundled loops. In addition, loops in greenfield[27] locations may not be made available to CLECs.
Include land, building, and power costs associated with hybrid copper-remote loops using the percentage of hybrid copper-remote loops based on growth deployments.	Included land, building, and power costs based on the percentage of in-service hybrid copper-remote loops.	Consistent with the use of copper cable NBVs.

III. Are the proposed service charge costs appropriate?

54. There are two types of unbundled loop service charges: a per-loop service charge[28] and a per-order service charge.[29] These charges are designed to recover various one-time activity costs incurred by the Bell companies to establish loop service for CLECs' end-customer orders (CLEC orders). The cost studies submitted in support of the Bell companies' proposed service order charges were developed using the all-carriers cost approach.[30]

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[26] FTTN facilities are used to deploy broadband services such as high-speed Internet and Internet Protocol television. Such a solution relies on copper pairs in the copper distribution cables between the customer premises and the nodes, and fibre feeder cables between the nodes and the COs.

[27] Greenfield locations are those where there are no existing ILEC telecommunications facilities.

[28] The per-loop service charge recovers major activity costs associated with jumper wire work in the CO, circuit design, dispatch, loop assignment, and loop activation.

[29] The per-order service charge recovers major activity costs associated with answering inquiries, issuing orders, traveling to customers' premises, and performing additional network interface device (NID) work.

[30] In Telecom Decision 2002-11, the Commission adopted the use of the all-carriers cost approach to calculate the per-loop and per-order service charges. Under this approach, the cost for each service is determined by calculating the weighted average cost using the relative proportions of ILEC and CLEC orders. The all-carriers approach ensures that the ILEC and the competitor will pay the same rate for using the same wholesale unbundled loop service input to offer its competing retail services.

55. The per-loop service charge recovers costs of activities that vary with the number of loops, while the per-order service charge recovers costs of activities that do not vary with the number of loops but are driven by the order itself. The cost of each activity is calculated by multiplying the time it takes to perform the activity (time estimate) by the labour unit cost for the ILEC employee performing the work and the percentage of time that the activity occurs (occurrence rate). This calculation is performed separately for ILEC end-customer orders (ILEC orders) and CLEC orders.

56. The Commission has identified the following costing issues related to the proposed service charge rates:

    a) Is it appropriate to reassign certain activities between the per-order and per-loop service charges?
    b) Are the Bell companies' proposed per-order and per-loop service charges appropriate?

a) Is it appropriate to reassign certain activities between the per-order and per-loop service charges?

57. In Decision 2001-694, the Commission determined the service charge rate structure for unbundled loops, setting out specific activity costs to be recovered through each of the per-order and per-loop service charges. In this proceeding, the Bell companies proposed two changes to these activity cost assignments – for order issuance costs for CLEC orders and for a technician's outside work at a customer's premises.

i) Order issuance costs for CLEC orders

58. The Bell companies proposed that, for CLEC orders, the per-loop service charge cost studies include the order issuance activity costs. The Bell companies noted that these costs are associated with the client representative's handling of manual interventions, which are performed for each loop in the CLEC order.

59. In Decision 2001-694, the Commission considered that order issuance costs were driven by the order itself for both ILEC and CLEC customer orders. The Commission therefore included those costs in the per-order service charge.

60. The Commission considers that under the Bell companies' proposal, the order issuance costs for ILEC orders would be recovered under the per-order service charge, while the order issuance costs for CLEC orders would be recovered under the per-loop service charge. The Commission notes that the all-carriers approach calculates the cost to provide a given service by blending the ILEC's costs to complete both ILEC and CLEC orders. The Commission considers, therefore, that it would be inappropriate to recover the order issuance costs through two separate rate elements.

61. Accordingly, the Commission determines that it is appropriate to continue to include order issuance costs for CLEC orders in the per-order service charge cost studies, consistent with the Commission's determinations in Decision 2001-694. The Commission notes that it has translated the per-loop CLEC order issuance costs into the per-order costs by applying the average number of loops per order to the per-loop costs.

ii) Technician's outside work at customer premises

62. The Bell companies submitted that the time estimates for the customer premises visit activity were taken from their tracking system and could not be provided separately for travel time and outside work time. The Bell companies therefore proposed to include the combined travel and outside work time associated with the customer premises visit activity in the per-order service charge cost studies.

63. The Commission notes that the existing per-loop service charge captures the technician's outside work costs, while the per-order service charge captures the associated travel time costs. However, given the Bell companies' submission that the technician's per-loop outside work costs cannot be separated from the per-order customer premises visit costs, the Commission determines that it is appropriate to include both the technician's outside work costs and travel time costs in the per-order service charge.

b) Are the Bell companies' proposed per-order and per-loop service charges appropriate?

64. Competitors submitted that the substantial increases in the proposed one-time service charges were largely due to the Bell companies' use of estimates from subject matter experts (SMEs) and that these estimates could not be tested or verified. They also submitted that costs for a number of retail-specific activities unrelated to loop provisioning should be removed from the service charge costs. MTS Allstream proposed that the Commission rely on MTS Allstream's SME estimates for certain activities.

65. The Bell companies submitted that if they did not rely on input from SMEs for their cost studies, they would have to conduct time and motion studies for multiple individual activities, which would be very time-consuming and expensive. They also submitted that their SMEs were knowledgeable and experienced in their respective fields and would make every effort to ensure the data was valid.

66. The Commission is concerned about the extent to which the Bell companies relied on SME estimates in the calculation of their proposed costs. The Commission notes that since most of the Bell companies' proposed occurrence rates and time estimates were not supported by measured data, it has been difficult to assess the reasonableness of the associated cost studies.

67. The Commission finds that the majority of the Bell companies' occurrence rates and time estimates used to calculate the proposed per-order and per-loop service charge activity costs[31] are significantly higher than their 2001 cost study estimates,[32] and considers that they tend to be too high. Furthermore, it considers that MTS Allstream's estimates tend to be too low. Nevertheless, both parties have experience and expertise in provisioning and purchasing unbundled loops. Where both the Bell companies and MTS Allstream provided SME estimates for a particular activity, the Commission considers that using the average of these two estimates will generally provide a fair estimate for that activity.

68. The Commission notes that the Bell companies included certain retail-related activities in the development of the per-activity costs. The Commission considers it appropriate to make a number of adjustments to the proposed occurrence rates and time estimates to remove any retail service activities so that the outcome reflects the wholesale nature of the service.

69. The following tables identify and describe the Commission's adjustments to the proposed occurrence rates and time estimates for the activities used to calculate the per-order and per-loop service charges.

i) Per-order service charge occurrence rates

Proposal	Commission adjustment	Rationale for adjustment
For CLEC orders, for the answering inquiries activity, use same rate for residence and business loop orders, based on SME estimate.	Used a revised rate equal to the average of the Bell companies' confidential SME estimate and MTS Allstream's SME estimate of 5%.	See paragraph 67.
For CLEC orders, for the order issuance activity, use same rate for residence and business loop orders, based on SME estimate.	Used a revised rate equal to the average of the Bell companies' confidential SME estimate and MTS Allstream's SME estimate of 10%.	See paragraph 67.

[31] While the proposed occurrence rates and activity time estimates were at issue in this proceeding, labour unit costs, which are filed with the Commission for approval on an annual basis, were not contested in this proceeding.

[32] The 2001 cost study estimates refer to the loop service order charges that the Bell companies submitted in the proceeding that led to Decision 2001-694.

Proposal	Commission adjustment	Rationale for adjustment
For CLEC orders, for the visiting customer premises activity, use same rate for residence and business loop orders, based on SME estimate.	Used a revised rate of 22.5%, which is equal to the average of the Bell companies' SME estimate of 30% and MTS Allstream's SME estimate of 15%.	See paragraph 67.
For ILEC orders, for the visiting customer premises activity, use separate rates for residence and business loop orders, based on census of all retail residential and business loop orders for January to March 2009.	Used a revised rate equal to the Commission-adjusted CLEC occurrence rate of 22.5% for this activity, plus an allowance for additional visits due to new installations.	Using retail visit rates overestimates wholesale loop visit rates due to the nature of retail services. ILEC loop visit rates are better approximated by wholesale CLEC loop visit rate; however, additional ILEC customer premises visits are expected for new installations, which typically do not occur for CLEC orders.
For ILEC orders, for the network interface device (NID) work[33] activity, use same rate for residence and business loop orders, based on SME estimate.	Used a revised rate equal to the Bell companies' proposed CLEC occurrence rate of 11% for NID work, plus allowance for additional occurrences due to new installations.	It is appropriate to estimate the ILEC occurrence rate based on the CLEC occurrence rate because the CLEC rate is based on sample data, rather than SME estimates. However, additional ILEC NID activity occurrences are expected for new installations, which typically do not occur for CLEC orders.

ii) Per-order service charge time estimates

Proposal	Commission adjustment	Rationale for adjustment
For CLEC orders, for the answering inquiries activity, use same time estimates for residence and business loop orders, based on SME estimates.	Used a revised time estimate equal to the average of the Bell companies' confidential SME estimate and MTS Allstream's SME estimate of five minutes.	See paragraph 67.

[33] The NID serves as the demarcation point between the loop and the customer premises wiring. NID work at the customer premises is required for a new installation or when the service wire has been cut and must be reconnected.

Proposal	Commission adjustment	Rationale for adjustment
For ILEC orders, for the order issuance activity, use separate time estimates for residence and business loop orders, based on a 2008 time study of 49 ILEC residence loop orders.	Removed time associated with "informing customers of rates and charges," and reduced by approximately 50 percent the costs for "query address," "establish due date," and "keying order information activities."	Adjustments consistent with determinations in Decision 2001-694.
For ILEC orders, for the visiting customer premises activity, use separate time estimates for residence and business loop orders, based on the Bell companies' internal work-time database.	Reduced time estimate to remove portion of travel time associated with non-voice service for orders involving both voice and non-voice services (multi-service order).	No evidence to demonstrate that a percentage of travel time was assigned to non-voice services in the case of multi-service orders. Assigned 50% of travel time to non-voice services for such orders.

iii) Per-loop service charge occurrence rates

Proposal	Commission adjustment	Rationale for adjustment
For ILEC orders, for the jumper wire work[34] activity, use same rate for residence and business loop orders, based on SME estimate.	Used Commission-adjusted ILEC occurrence rate for visiting customer premises as a proxy for jumper wire work occurrence rate.	If there is no customer visit, there is generally no need for jumper wire work to be performed in the CO. Therefore, the occurrence rates for both activities should be similar.
For ILEC orders, for the business loop activation[35] activity, use the rate for business loop orders, based on SME estimate.	Used the Bell companies' proposed business loop assignment rate as a proxy for the ILEC business loop activation rate.	Given that a loop order that requires the assignment activity also requires the activation activity, the occurrence rates for business loop activation and loop assignment are expected to be the same.

[34] Jumper wire work is required in the CO to connect the loop to the local switch. In the case of the CLEC, jumper wire work is needed to connect the loop to the co-location space.

[35] For ILEC orders, loop activation activity includes those activities required to activate, as needed, dial tone, SmartTouch features, and voice mail.

Proposal	Commission adjustment	Rationale for adjustment
For ILEC residence orders, for the loop assignment[36] activity, use the rate for residence loop orders, based on SME estimate.	Used the Bell companies' proposed residence loop activation rate as a proxy for the residence loop assignment rate.	Given that a loop order that requires the assignment activity also requires the activation activity, the occurrence rates for residential loop activation and loop assignment are expected to be the same.

iv) Per-loop service charge time estimates

Proposal	Commission adjustment	Rationale for adjustment
For ILEC orders, for the jumper wire work activity, use the same time estimate for residence and business loop orders, based on SME estimate.	Reduced time estimate associated with voice-only service orders by applying the estimate of ILEC jumper wire work time from the 2001 cost study to these orders.	The Bell companies' proposed time estimate increases compared to the 2001 cost studies were primarily due to the more complex jumper wire work associated with orders for customers subscribed to both voice and DSL services. Jumper wire work for voice-only service is less complex.
For CLEC orders, for the jumper wire work activity, use the same time estimate for residence and business loop orders, based on SME estimate.	Used the 2001 cost study time estimate for ILEC loop orders as a proxy for the CLEC loop jumper wire work time estimate, but included additional time for the technician to call the CLEC to confirm completion of work.	The Commission-adjusted time estimates for CLEC loop orders reflect less complex jumper wire work associated with voice-only service orders.
For CLEC orders, for the circuit design[37] activity, use the same time estimate for residence and business loop orders, based on SME estimate.	Reduced the proposed time estimate for CLEC business loop orders to account for efficiencies in processing multiple loops on the same order.	There are generally multiple loops in a CLEC business order. The adjustment reflects a 30% efficiency gain from processing multiple loops on the same business customer order.

[36] Loop assignment activity is required to verify that the assignment of the loop is correct before forwarding the order to the CO, the activation team, and field technicians.

[37] Circuit design activity is required for CLEC loops to ensure that the assigned facilities meet the provisioning specifications for elements that are unique to each CLEC loop.

Proposal	Commission adjustment	Rationale for adjustment
For ILEC orders, for the loop activation activity, use the same time estimate for residence and business loop orders, based on SME estimate.	Reduced proposed time estimate by 50% to remove time for activities not related to the unbundled loop service.	Appropriate to include time for only those activities associated with the unbundled loop service and to exclude activities such as SmartTouch and voice mail, which are related to retail services.
For CLEC orders, for the loop activation activity, use same time estimate for residence and business loop orders, based on SME estimate.	Reduced proposed time estimates for CLEC loop activation based on the Commission's time reductions to the loop activation activity for ILEC orders.	No evidence that there should be a difference between CLEC and ILEC time estimates for this activity, except for the additional time required to interface with the National Portability Administration Centre.

IV. What monthly recurring rates and service charge rates are just and reasonable?

70. The Bell companies submitted that if the NBV costing approach were used in the cost studies associated with the monthly recurring rates, the 15 percent markup should apply to the copper cable NBVs.

71. In Telecom Decision 2008-17, the Commission determined that the unbundled loop service would continue to be priced based on prospective incremental costs plus a 15 percent markup. The Commission notes that in this decision, it has determined that the copper cable NBVs will provide appropriate estimates of the prospective incremental costs associated with the Bell companies' use of their existing copper cable plant for the unbundled loop service.

72. Accordingly, the Commission determines that it is appropriate to apply the 15 percent markup to the copper cable NBVs in determining the final monthly recurring rates.

73. Having determined the appropriate costs for each of the monthly recurring and service charge rates, the Commission determines that the rates set out in Appendices 1 and 2 to this decision, which reflect prospective incremental costs plus a 15 percent markup, are just and reasonable.

74. In light of the above, the Commission **approves on a final basis** the revised monthly recurring rates for Type A unbundled loops set out in Appendix 1 to this decision and the revised service charge rates for Type A and Type B unbundled local loops set out in Appendix 2.

V. Should the revised rates be applied on a retroactive basis?

75. Competitors generally submitted that they could not return to their retail customers to recover any retroactive increases in these rates and that the financial burden on competitors could be great. They submitted that, therefore, final monthly recurring rates and service charge rates should not be approved on a retroactive basis.

76. Primus submitted that in past decisions and orders, the Commission had retroactively applied final rates only when those rates had been set at a lower level than the interim rates. Primus submitted that should the final approved rates be higher than the existing rates, the final rates should be applied on a prospective basis only.

77. MTS Allstream submitted that if the Commission were to approve loop rates that were higher than the existing rates, it would be appropriate to apply them from the date that comparable increases were reflected in the retail market and in the subsidy requirement.

78. The Bell companies submitted that competitors could have provisioned for the potential effect of retroactive rate adjustments in their respective budgets since the Commission issued Telecom Order 2009-775. They also submitted that whether the revised rates would result in an increase or decrease relative to the rates made interim should have no bearing on the issue of whether the revised rates should be applied retroactively. They further submitted that the determination to retroactively apply the final rate adjustments should not depend on reflecting adjustments in retail rates and/or the subsidy requirement.

79. The Commission notes that the rates approved in this decision reflect the service's current costs. In the circumstances of this case, the Commission determines that the revised rates are effective as of **14 December 2009**, the date that the existing rates were made interim.

80. The Commission directs the Bell companies to issue revised tariff pages that are consistent with the determinations in this decision within 30 days of the date of this decision.

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

81. The Commission considers that its determinations in this decision advance the telecommunications policy objectives set out in paragraphs 7(*b*), 7(*c*), and 7(*f*) of the *Telecommunications Act*.[38] The Commission also considers that its determinations are consistent with the Policy Direction requirements that (a) the measures in question be

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[38] 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.

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.

Secretary General

Related documents

- *Proceeding to review access to basic telecommunications services and other matters*, Telecom Notice of Consultation CRTC 2010-43, 28 January 2010, as amended by *Obligation to serve and other matters,* Telecom Notice of Consultation CRTC 2010-43-1, 5 March 2010; Telecom Notice of Consultation CRTC 2010-43-2, 30 March 2010; and Telecom Notice of Consultation CRTC 2010-43-3, 23 July 2010

- *Bell Aliant Regional Communications, Limited Partnership and Bell Canada – Revised rates for unbundled loop wholesale service*, Telecom Order CRTC 2009-775, 14 December 2009

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

- *CRTC approves revised unbundled loop service order charges for Bell Canada, Aliant Telecom Inc. and MTS Communications Inc.*, Telecom Decision CRTC 2002-11, 18 February 2002

- *Interim approval for revised unbundled loop-service order charges*, Decision CRTC 2001-694, 16 November 2001

- *Restructured bands, revised loop rates and related issues*, Decision CRTC 2001-238, 27 April 2001

- *Final rates for unbundled local network components*, Telecom Decision CRTC 98-22, 30 November 1998

- *Local competition*, Telecom Decision CRTC 97-8, 1 May 1997

Appendix 1

Unbundled Loop Monthly Recurring Rates in Ontario and Quebec

	Band A	Band B	Band C	Band D	Band E	Band F
Bell Aliant	n/a	$10.96	$13.48	$16.28	$29.57	$30.27
Bell Canada	$6.75	$13.45	$15.42	$17.61	$28.40	$22.43

Appendix 2

Unbundled Loop Service Charge Rates

	Per-order Business	Per-order Residence	Per-loop Business	Per-loop Residence
Bell Aliant	$74.53	$67.15	$9.93	$9.73
Bell Canada	$64.40	$46.60	$9.93	$9.73