



## Telecom Decision CRTC 2021-181

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### **Requests to review and vary Telecom Order 2019-288 regarding final rates for aggregated wholesale high-speed access services**

In Telecom Order 2019-288, the Commission made a number of determinations regarding proposals from wholesale high-speed access (HSA) service providers in setting aggregated wholesale HSA service rates. Subsequently, the Commission received applications from Bell Canada, the cable carriers, and TCI to review and vary many of those determinations.

The Commission has completed its review of Telecom Order 2019-288 and determines that there is substantial doubt as to the correctness of the aggregated wholesale HSA service rates, which include certain monthly capacity rates per 100 megabits per second, monthly access rates per end-user, and rates related to service charges set in Telecom Order 2019-288.

Correcting the errors that led to the substantial doubt would, in certain cases, require additional information, and lead to significant increases in rates set in Telecom Order 2019-288 and would likely set rates that would approach and be comparable to those currently in place on an interim basis.

The Commission is concerned that completing a fulsome revision of all the cost studies would prolong the period of regulatory and market uncertainty. The Commission is also concerned that committing significant resources to this process would contribute to impeding the ultimate goal of transitioning to the adoption of disaggregated wholesale HSA service, including reviewing service configurations for the disaggregated wholesale HSA service framework for all wholesale HSA service providers across the country.

The Commission's general approach towards wholesale service regulation has been to promote facilities-based competition wherever possible. Facilities-based competition, in which competitors primarily use their own telecommunications facilities and networks to compete instead of leasing them from other carriers, is typically regarded as the most sustainable form of competition. The Commission's primary goal with respect to non-mandated aggregated wholesale HSA service is to complete the transition to mandated disaggregated wholesale HSA service in an appropriate manner so that Canadians can benefit from the increased facilities-based competition it will bring, including access to the incumbent local exchange carriers' fibre facilities. Moving to a disaggregated wholesale HSA service framework will also lessen competitor dependence on price regulation and give competitors more control over their cost structure.

In striking a balance between regulatory certainty, market stability, and regulatory burden, as well as taking into consideration the ultimate goal of transitioning to the mandated disaggregated wholesale HSA framework, the Commission **approves on a final basis** the rates for aggregated wholesale HSA service that were in effect on an interim basis prior to the issuance of Telecom Order 2019-288, with certain modifications, including the removal of the supplementary markup of 10% for incumbent local exchange carriers.

The Commission further determines that the aggregated wholesale HSA service rates that are made final in this decision are to be applied retroactively to when the rates were made interim.

The Commission also determines that for wholesale HSA service providers that do not have banded access rates implemented, the Commission approves the highest interim aggregated wholesale HSA access rate within the proposed banded access ranges submitted in the proceeding that led to Telecom Order 2019-288.

## Introduction

1. The Commission regulates the wholesale high-speed access (HSA) services provided by incumbent local exchange carriers (ILECs)<sup>1</sup> and cable carriers<sup>2</sup> (collectively, the wholesale HSA service providers or the incumbents). Competitors (i.e. the customers that purchase wholesale HSA services) can use these services to provide their own retail Internet services and other services to their end-users.
2. Historically, the Commission has mandated the incumbents to each provide an aggregated wholesale HSA service. This service enables competitors to lease packages of both the access facilities they need to connect to customer locations and the transport facilities through which large amounts of traffic can be sent and received, without requiring them to invest substantially in facilities of their own. The competitors then provide their own services to retail customers using the aggregated wholesale HSA service. While this service is not available on incumbent fibre-to-the-premises (FTTP) facilities, which incumbents require to provide the highest-speed services currently available, it is available at those speeds on the cable carriers' hybrid-fibre coaxial (HFC) networks, which contributes to an asymmetry between ILECs and cable carriers in relation to this service. Aggregated wholesale HSA service is the service that competitors primarily use today to provide HSA services, and is the subject of the current decision.

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<sup>1</sup> In this decision, "ILECs" refers to Bell Canada; Bell MTS, a division of Bell Canada; Saskatchewan Telecommunications; and TELUS Communications Inc.

<sup>2</sup> In this decision, "cable carriers" refers to Bragg Communications Incorporated, carrying on business as Eastlink; Cogeco Communications inc.; Rogers Communications Canada Inc.; Shaw Cablesystems G.P.; and Videotron Ltd.

3. The Commission's long-term objective in the wholesale HSA service market is to encourage competition and, in particular, facilities-based competition. With this objective in mind, the Commission reviewed its framework for the provision of wholesale HSA services, with a view to encouraging competitive participation in the market on a disaggregated basis. With a disaggregated HSA service, competitors acquire only the access service on a wholesale basis, since they can provision transport through self-supply or lease transport network facilities from other service providers. Through investments in facilities, competitors can compete to a greater extent than under the aggregated wholesale HSA service framework. In order to provide higher-speed services to end-users, disaggregated wholesale HSA service will be available on incumbent FTTP facilities, and there are currently interim tariffs in place for access to these services in Ontario and Quebec. However, because the service has not been fully implemented, few competitors currently make use of the service.
4. The context for the current decision is therefore somewhat unique. Finality and certainty with respect to the rates for aggregated wholesale HSA service are of critical importance to the industry, which has been functioning under interim rates for these services for more than four years. The Commission's role in ensuring that rates are just and reasonable at all times is fundamental to ensuring that the policy objectives of increased competition, affordability of services, and investment in networks are achieved.
5. However, this decision essentially speaks to the present and the past. The Commission's primary goal with respect to wholesale HSA service is to complete the transition to disaggregated wholesale HSA service in an appropriate manner such that Canadians can benefit from the increased facilities-based competition it will bring, including access to the incumbents' FTTP facilities. Finalizing the rates for aggregated wholesale HSA service in a timely manner so that the focus can shift to determining the rates, terms, and conditions for disaggregated wholesale HSA service across the country is the best way to ensure the Canadian telecommunications policy objectives (the policy objectives) set out in section 7 of the *Telecommunications Act* (the Act) are fulfilled in the long-term.
6. The Commission's determinations below attempt to balance the need for certainty and accuracy in the aggregated wholesale HSA service rates with the realities of undertaking complex costing-based rate setting with respect to services that will be phased out in the foreseeable future.

## **Regulatory background**

### **Telecom Regulatory Policy 2011-703**

7. To foster competition in the high-speed Internet service market, the Commission began a public proceeding in Telecom Notice of Consultation 2011-77 to review the billing practices for wholesale residential HSA services. The objective of the proceeding was to decide how wholesale HSA service providers should charge for access to and use of their networks through aggregated points of interconnection (POIs).

8. As a result of that proceeding, the Commission, in Telecom Regulatory Policy 2011-703, approved two types of billing models for residential wholesale HSA services: a capacity-based billing (CBB) model and a flat-rate model. Under the CBB model, competitors determine in advance the amount of capacity they will require to offer retail services. Should demand exceed this capacity, they will have to manage their network capacity until they purchase more. Competitors are able to change their capacity requirements monthly under the CBB model, whereas under the flat-rate model, competitors pay a flat fee per month, regardless of usage.
9. The Commission also determined that rates for wholesale services should be based on each of the incumbents' costs to provide the service, plus a reasonable markup, and that these markups are to be comparable for all cable carriers and for all ILECs. As an exception, and consistent with the Commission's determinations in Telecom Regulatory Policy 2010-632, ILECs were allowed to charge an additional 10% markup for access to the faster fibre-to-the-node (FTTN) services. This was done, in part, to encourage these companies to continue to invest in the FTTN technology that extends fibre-based facilities closer to the end-user's premises (but not directly to the premises, as with FTTP technology) while using legacy copper facilities to provide increasingly higher-speed access services.
10. The wholesale HSA service rates established pursuant to Telecom Regulatory Policy 2011-703 were based on the following study parameters applied across all wholesale service providers:
  - the cost study used to develop the rates should be based on a 10-year study period;
  - the first two years of traffic growth rates should be consistent with historical levels, followed by a constant growth rate of 20% for each of the remaining years of the study period;
  - for ILECs, the cost study should employ annual capital unit cost changes of minus 5% for access-driven equipment and minus 10% for usage-driven equipment, to reflect reasonable estimates of the impact of expected equipment capacity increases and unit cost reductions over the study period. For cable carriers, annual capital unit cost changes of minus 10% for all equipment over the study period should be used; and
  - under the CBB model, competitors purchase network capacity to support their usage requirements in increments of 100 megabits per second (Mbps).

### **Disaggregated wholesale high-speed access service**

11. The Commission's general approach towards wholesale service regulation has been to promote facilities-based competition wherever possible. Facilities-based competition, in which competitors primarily use their own telecommunications facilities and networks to compete instead of leasing them from other carriers, is regarded as the most sustainable form of competition.

12. Access to the incumbents' wholesale HSA services could be provided either through aggregated POIs at a few consolidated locations or through disaggregated POIs at different distributed locations. The Commission, in Telecom Regulatory Policy 2011-703, favoured the provision of wholesale HSA services on an aggregated basis to encourage competitors to establish themselves in the market with limited levels of investment.
13. One of the main drawbacks of the aggregated wholesale HSA service framework is the higher cost incurred by competitors when transporting large amounts of traffic over the incumbents' facilities. In addition, the aggregated wholesale HSA service framework requires competitors to rely almost entirely on an incumbent's network; therefore, the framework depends on the Commission to set appropriate rules and just and reasonable rates.
14. Consequently, an important benefit of moving to a disaggregated wholesale HSA service framework is to lessen competitors' dependence on price regulation and give competitors more control over their cost structure. Moving to a disaggregated wholesale HSA service framework will better support the sustainability of competition and can be expected to provide improved benefits, such as more reasonable prices and innovative services, to consumers.
15. In its review of wholesale wireline services in Telecom Regulatory Policy 2015-326, the Commission made a number of determinations to encourage facilities-based competition, including the following:
  - The provision of aggregated wholesale HSA service will no longer be mandated because, while it is not practical or feasible for competitors to duplicate the access component of wholesale HSA services, this limitation does not apply with respect to competitive provisioning of the transport component.
  - The aggregated wholesale HSA service framework will be phased out in conjunction with the implementation of disaggregated wholesale HSA service.<sup>3</sup>
  - Implementation of disaggregated wholesale HSA service in the designated geographic markets will be triggered by competitor requests for the service at specific central office (CO) and head-end locations. Disaggregated wholesale HSA service should be implemented in phases, starting with Ontario and Quebec, and then in other geographic markets.
  - Competitors wanting access to end-users served by FTTP access facilities will only be able to do so using disaggregated wholesale HSA service.

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<sup>3</sup> A review to address the appropriate network and service configurations for the disaggregated wholesale HSA service framework is currently in progress in Telecom Notice of Consultation 2020-187.

- A speed threshold will be imposed for the service speeds available over aggregated wholesale HSA service, such that download speeds in excess of 100 Mbps will be required to be made available to competitors only through the implementation of disaggregated HSA service (the 100 Mbps speed cap).<sup>4</sup>
- Once the disaggregated wholesale HSA service tariff for an incumbent's serving territory is approved on a final basis, the obligation to provide aggregated wholesale HSA service capable of supporting speeds in excess of 100 Mbps will be removed. Incumbents are to grandfather existing aggregated wholesale HSA service customers that are served above the 100 Mbps speed cap at that time.
- After the implementation of disaggregated HSA service, competitors will be entitled to a three-year phase-out period in order to invest in, migrate to, or negotiate appropriate alternative transport facilities.
- After the phase-out period, incumbents will have the ability to continue offering aggregated wholesale HSA service at tariffed rates, cease providing the service in the regions served by disaggregated wholesale HSA service, file applications for forbearance one year prior to the end of the phase-out transition period, or enter into off-tariff agreements for aggregated wholesale HSA service.

16. Also in Telecom Regulatory Policy 2015-326, the Commission determined that disaggregated wholesale HSA service should be implemented across Canada in phases, starting with Ontario and Quebec. Consequently, the Commission directed Bell Aliant Regional Communications, Limited Partnership (Bell Aliant);<sup>5</sup> Bell Canada; Cogeco Communications inc. (Cogeco);<sup>6</sup> Rogers Communications Canada Inc. (RCCI);<sup>7</sup> and Videotron Ltd. (Videotron)<sup>8</sup> to file with the Commission their respective proposed configurations for disaggregated wholesale HSA service.

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<sup>4</sup> Pursuant to a Canadian Network Operators Consortium Inc. application to review and vary Telecom Regulatory Policy 2015-326, the Commission, in a [letter](#) dated 11 June 2020, among other things, suspended the implementation of the 100 Mbps speed cap.

<sup>5</sup> Bell Aliant was integrated into Bell Canada on 1 July 2015. As a result of this integration, Bell Aliant's wireline operations are now part of Bell Canada.

<sup>6</sup> In that decision, the Commission referred to Cogeco Cable Inc. However, as of 14 January 2016, Cogeco Cable Inc. operates as Cogeco Communications inc. For ease of reference, "Cogeco Communications inc." is used in this decision.

<sup>7</sup> In that decision, the Commission referred to Rogers Communications Partnership (RCP). However, RCP ceased to exist on 1 January 2016. All of RCP's business activities, including its assets and liabilities, are now held by RCCI. For ease of reference, "RCCI" is used in this decision.

<sup>8</sup> In that decision, the Commission referred to Videotron G.P. However, effective 29 December 2017, all of Videotron G.P.'s assets and operations were transferred to Videotron Ltd., and Videotron G.P. was subsequently dissolved. For ease of reference, "Videotron Ltd." is used in this decision.

17. Subsequent to the above directive, the Commission received different proposals from the above-mentioned incumbent carriers on their respective proposed configurations for disaggregated wholesale HSA service.
18. In Telecom Decision 2016-379, the Commission directed Bell Canada and the cable carriers to file proposed rates with associated cost studies for their respective disaggregated wholesale HSA services that reflected the Commission's directives set out in that decision. In addition, the Commission directed Bell Canada to file proposed tariffs with associated cost studies for an outside meet-me point interconnection service that provides a POI between the competitor and the wholesale HSA service provider located outside an ILEC's CO or cable carrier's head-end.
19. With the objective of providing competitors with more control over their costs, the Commission further directed Bell Canada and the cable carriers to provide competitors with the ability to buy capacity in 50 Mbps increments for their respective disaggregated wholesale HSA services as opposed to the 100 Mbps for their respective aggregated wholesale HSA services.
20. Subsequently, Bell Canada and the cable carriers filed with the Commission their respective tariff applications for the introduction of disaggregated wholesale HSA service with proposed rates, terms, and conditions, along with supporting cost studies.
21. In Telecom Orders 2017-312 and 2017-312-1, the Commission determined that Bell Canada, Cogeco, RCCI, and Videotron should make disaggregated wholesale HSA service available on an interim basis to competitors in Ontario and Quebec, and set out the interim rates as well as the terms and conditions for this service. The Commission also expressed its view that the availability of disaggregated wholesale HSA service will enable competitors to become more innovative by giving them a greater degree of control over their service offerings to Canadians, including access to FTTP facilities.
22. In Telecom Notice of Consultation 2020-187, the Commission temporarily suspended the proceeding initiated in Telecom Decision 2016-379 to set final rates, terms, and conditions for disaggregated wholesale HSA service provided by Bell Canada and the cable carriers in Ontario and Quebec. The Commission also stated that, in the meantime, the existing interim rates, terms, and conditions for this service in Ontario and Quebec established in Telecom Order 2017-312 will remain in effect.
23. With the goal to facilitate the deployment of disaggregated wholesale HSA service across Canada, the Commission, in Telecom Notice of Consultation 2020-187, requested that parties comment on the appropriate level of disaggregation and service configurations for the disaggregated wholesale HSA service framework for all wholesale HSA service providers across the country.

24. The Commission also directed Bell Aliant; Bell Canada; Bell MTS, a division of Bell Canada (Bell MTS); Bragg Communications Incorporated, carrying on business as Eastlink (Eastlink); Cogeco; RCCI; Saskatchewan Telecommunications (SaskTel); Shaw Cablesystems G.P. (Shaw); TELUS Communications Inc. (TCI); Videotron; and interested persons to provide their respective views, with supporting rationale and evidence, on the following:
- Whether or not the existing disaggregated wholesale HSA service framework supports an orderly, cost-effective transition from aggregated to disaggregated wholesale HSA service; if not, how disaggregated wholesale HSA service should be modified to facilitate the deployment of the services.
  - What factors should be taken into account in developing disaggregated wholesale HSA service configurations that include a reduced level of disaggregation (as opposed to full disaggregation) and that would allow for an efficient, cost-effective deployment of the disaggregated wholesale HSA service framework across the country.
25. The proceeding initiated by Telecom Notice of Consultation 2020-187 is currently in progress.

#### **Telecom Decision 2016-117**

26. In Telecom Notice of Consultation 2015-225, the Commission indicated concerns that the then-current costing assumptions and processes used to set rates for aggregated wholesale HSA service may no longer result in just and reasonable rates. It sought submissions on various issues related to wholesale HSA services, including (i) whether the cost and rate structure should be simplified with a view to reducing administrative burden and expediting final disposition of wholesale HSA tariff applications, (ii) whether certain parameters used in cost studies should be modified and whether the Commission should replace certain parameters used in such studies, and (iii) whether usage-sensitive equipment should be assigned to the traffic-driven portion of cost models.
27. The Commission issued its determinations with respect to Telecom Notice of Consultation 2015-225 in Telecom Decision 2016-117. In that decision, the Commission made the determination that the final rates for aggregated wholesale HSA service were likely not just and reasonable. As a result, it made all existing non-legacy aggregated wholesale HSA service rates that had been approved on a final basis interim, and directed all wholesale HSA service providers to file cost studies reflecting its determinations.
28. In coming to this conclusion, the Commission determined that it was necessary to simplify the tariff application process for aggregated wholesale HSA service by adopting a speed-banding approach for rate setting. Previously, the incumbents were required to file cost studies for each individual service speed they planned to introduce in the market. However, under the speed-banding approach, the

incumbents would have the flexibility to introduce new service speeds within a set speed band for which a rate had been already set, without filing an associated cost study.

29. The Commission also modified certain parameters used in performing cost studies for wholesale HSA services, replacing parameters established under Telecom Regulatory Policy 2011-703. Specifically, the Commission (i) reduced the study period from 10 years to 5 years, (ii) modified the annual traffic growth rate assumption from 20% to 32%, and (iii) adjusted the annual capital unit cost change assumption from minus 10% to minus 26.4% for traffic-driven equipment.
30. The Commission noted that usage-sensitive equipment in the access portion of cost models can be identified and removed to aid in the creation of speed bands by reducing variability in the access costs between the various service speeds within a speed band. As a result, the Commission determined that the incumbents must ensure that all equipment costs accounted for in the access portion of the cost models include only costs for non-usage-sensitive equipment.

#### **Telecom Orders 2016-396 and 2016-448**

31. In response to Telecom Decision 2016-117, the incumbents filed proposed amended tariff pages for their respective non-legacy aggregated wholesale HSA services, including proposed rates that would be put in place on an interim basis pending completion of the Commission's costing exercise. However, the Commission identified that these proposed rates were not consistent with its previous determinations or costing principles, and made significant adjustments that largely lowered the incumbents' proposed rates.
32. In particular, in Telecom Orders 2016-396 and 2016-448, the Commission determined the following:
  - The access portion of the aggregated wholesale HSA service rates of Bell Canada, Bell MTS,<sup>9</sup> Cogeco; RCCI, and Videotron, made interim in Telecom Decision 2016-117, should remain unchanged for the time being.
  - The access costs of Eastlink; SaskTel; Shaw; and TELUS Communications Inc. (TCI),<sup>10</sup> as well as the network usage costs proposed by most of the incumbents, were not reasonable due to deviations from Phase II costing principles and the lack of pertinent costing details, including descriptions of input data variables and modelling assumptions without supporting rationale.

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<sup>9</sup> In those orders, the Commission referred to MTS Inc. In March 2017, BCE Inc. completed its acquisition of MTS Inc., which is now operating as Bell MTS. For ease of reference, "Bell MTS" is used in this decision.

<sup>10</sup> In those orders, the Commission referred to TELUS Communications Company (TCC). However, effective 1 October 2017, TCC's assets were legally transferred to TCI and TCC ceased to exist. For ease of reference, "TCI" is used in this decision.

The Commission concluded that the proposed monthly rates associated with the tariff elements in question were, on a *prima facie* basis, not based on reasonable costs.

33. As a result, the Commission significantly revised the proposed interim monthly capacity rates per 100 Mbps service, with reductions of up to 89% for Bell Canada, Bell MTS, Cogeco, Eastlink, RCCI, Shaw, and Videotron; revised the proposed banded access rates of Eastlink, Shaw, and TCI; and approved SaskTel's proposed banded access rate. The Commission made these revised rates interim and set capacity rates for service charges interim for Eastlink and Shaw. The adjusted interim rates for aggregated wholesale HSA service set in those orders have, for the most part, remained in place until the date of publication of this decision.
34. In Telecom Orders 2016-396 and 2016-448, the Commission also determined that the interim rates approved therein were based on an examination that was necessarily less than fully comprehensive, and that the establishment of the final rates would be based on a full review and assessment of the relevant cost inputs and costing methodologies.

#### **Telecom Order 2019-288**

35. In Telecom Order 2019-288, the Commission approved aggregated wholesale HSA service rates on a final basis. Based on a complex record developed over three years, the Commission made numerous determinations with respect to the cost studies underlying the proposed rates, and made additional significant adjustments to the proposed rates as a result. The Commission also determined that these final rates would be applied retroactively (generally back to the date they were made interim).
36. However, Telecom Order 2019-288 was subject to numerous challenges and stay requests before the courts, Cabinet, and the Commission itself, resulting in a situation where the final rates set out in that order have never been implemented.
37. On 12 September 2019, Bell Canada and Bell MTS, as well as the cable carriers, filed motions for leave to appeal the order, pursuant to subsection 64(1) of the Act, with the Federal Court of Appeal (FCA).
38. On 27 September 2019, the FCA granted a stay of Telecom Order 2019-288 pending the outcome of the court proceeding.
39. On 10 September 2020, the FCA denied the appeals by Bell Canada and Bell MTS and by the cable carriers, thereby removing the stay of Telecom Order 2019-288. On 28 September 2020, the Commission issued Telecom Decision 2020-342, implementing a stay of Telecom Order 2019-288 pending its determinations with respect to the review and vary applications.

40. On 12 November 2020, Bell Canada and the cable carriers filed with the Supreme Court of Canada (SCC) motions for leave to appeal the FCA decision upholding Telecom Order 2019-288. On 25 February 2021, the SCC dismissed the motion for leave to appeal.
41. In parallel with these challenges to the courts, Bell Canada, TCI, and the cable carriers each presented to the Governor in Council a petition in which they requested that the Governor in Council vary Telecom Order 2019-288 or refer it back to the Commission for reconsideration of their petitions. The petitions were filed on 13 November 2019.
42. In Order in Council P.C. 2020-0553, 13 August 2020, the Governor in Council considered that the final rates set out in Telecom Order 2019-288 do not, in all instances, appropriately balance the objectives of the wholesale services framework recognized in Order in Council P.C. 2016-332, 10 May 2016, and that they will, in some instances, undermine investment in high-quality networks. The Governor in Council also determined that exercising its authority under subsection 12(1) of the Act to vary or refer back the order to the Commission for reconsideration at that time would be premature, pending a decision from the Commission with respect to the review and vary applications. Based on the above, the Governor in Council declined to vary, rescind, or refer back to the Commission for reconsideration Telecom Order 2019-288.
43. Finally, the Commission received applications from TCI, dated 13 November 2019; from Bell Canada, dated 13 December 2019; and from the cable carriers, dated 13 December 2019, in which they requested that the Commission review and vary Telecom Order 2019-288. These applications are the subject of this decision and are discussed in detail below.
44. Given the importance of ensuring that rates are established in an efficient manner, and since wholesale rate setting can have a significant impact on the telecommunications market, the Commission, in Telecom Notice of Consultation 2020-131, further initiated a proceeding to review which of the various available rate-setting approaches should be selected that would result in wholesale rates for telecommunications services that are just and reasonable (the wholesale rate-setting review). That proceeding is currently in progress.

### **Review and vary criteria**

45. In Telecom Information Bulletin 2011-214, the Commission outlined the criteria it would use to assess review and vary applications filed pursuant to section 62 of the Act. Specifically, the Commission stated that applicants must demonstrate that there is substantial doubt as to the correctness of the original decision, for example due to (i) an error in law or in fact, (ii) a fundamental change in circumstances or facts since the decision, (iii) a failure to consider a basic principle which had been raised in the original proceeding, or (iv) a new principle which has arisen as a result of the decision.

## Review and vary applications

46. The review and vary applications were merged into a single proceeding, and the Commission considers it appropriate to review all the applications together. The Commission received interventions from Allstream Business Inc. (Allstream), the British Columbia Broadband Association (BCBA), the Canadian Network Operators Consortium Inc. (now Competitive Network Operators of Canada [CNO]), Distributel Communications Limited (Distributel), and TekSavvy Solutions Inc. (TekSavvy).

## TCI's application

47. TCI requested that the Commission review and vary its determinations in Telecom Order 2019-288 by
- eliminating the service-based attribution factor, given that it is a departure from economic rate-setting principles;
  - restoring the company's cost model as originally submitted, so that the cash flows associated with its existing as well as new end-users are reflected properly; and
  - removing the retroactive application of the rates, so that rates are applied prospectively from the date of the order, i.e. 15 August 2019. If the Commission does not remove the retroactive application of the rates entirely, then, at a minimum, the change in markup from 40% to 30% should only be applied prospectively from the date of the order.
48. TCI submitted that the Commission committed errors of fact and law in that it did not include costs that are causal to the service and did not follow the Phase II costing methodology. TCI added that the approved rates are not just and reasonable because the errors resulted in rates that are not compensatory for the wholesale HSA service providers and will discourage investment in networks by both incumbents and competitors.
49. TCI further argued against the retroactive application of rates, given that the dramatic change in rates plus the length of the retroactive period resulted in regulatory instability. It submitted that the Commission failed to recognize the impact of the retroactive amounts, which was a failure to consider a basic principle that had been raised in the original proceeding. TCI also submitted that applying the reduction in markup on a retroactive basis counters prior Commission determinations related to retroactivity only being applied in cases of costing errors or adjustments, and not in cases of markup adjustments.
50. TCI submitted that substantial policy questions arise from Telecom Order 2019-288 and the Commission's mandated wholesale access regime in general. TCI argued that Telecom Order 2019-288 will have a negative impact on investment in broadband infrastructure and the competitive broadband Internet service market in Canada.

Additionally, the order undermines the federal government's policy objectives and directions, and ultimately results in regulatory uncertainty, which causes serious concerns for a heavily capital-intensive industry such as telecommunications.

51. TCI therefore requested that the Commission correct the errors identified in the setting of final rates.

### **Bell Canada's application**

52. Bell Canada requested that the Commission stay the implementation of Telecom Order 2019-288 and vary the order by (i) making the rates in effect just prior to its issuance (the interim rates) final, and (ii) removing the requirement for any retroactive rate adjustments.
53. Bell Canada specifically requested that the Commission change the order in which it planned to hold certain already-announced upcoming wholesale service proceedings as follows: The Commission should first conduct a review of the wholesale wireline regulatory regime, including an assessment of whether mandated access to legacy and new broadband networks is in the public interest, having regard to the impact mandated access has upon investment in network infrastructure in all areas of the country. It should then conduct a review of its approach to wholesale rate setting, including whether Phase II costing remains the most appropriate rate-setting methodology.<sup>11</sup> This would include investigating alternatives to Phase II costing, such as whether commercial negotiations backstopped by binding arbitration are more appropriate methods of rate setting.
54. Bell Canada argued that there is substantial doubt as to the correctness of the final rates set in Telecom Order 2019-288 based on errors in fact that are associated with the Commission's determinations, and provided details to support its position.
55. According to Bell Canada, the end result is that the approved rates are below its actual costs, as measured from the company's own financial records and databases. Bell Canada submitted that the approved rates, together with the determination that they be applied retroactively, has an unprecedented unwarranted negative financial impact on the company's business and provides an unjustified windfall to competitors, who have no obligation to pass the impact of the savings on to their customers.
56. Bell Canada submitted that its proposed remedy in adopting the interim rates as the final rates and removing the requirement for retroactive rate reductions will eliminate the otherwise significant negative impact of the order on future investments, especially in rural and remote areas, and ultimately on the Canadian economy as a whole.

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<sup>11</sup> Phase II costing reflects the costs of the prospective incremental resources used to provide the service, consistent with the costing methodologies and assumptions set out in the approved Regulatory Economics Studies Manuals.

57. Bell Canada further submitted that its proposed remedy is also consistent with

- subparagraph 1(a)(i) of the 2006 Policy Direction,<sup>12</sup> in that a company would be expected at the very least to recover its costs, to the maximum extent feasible, as a means of achieving the policy objectives;
- subparagraph 1(a)(ii) of the 2006 Policy Direction, which states that the Commission, when relying on regulation, use measures that interfere with the operation of competitive market forces to the minimum extent necessary to meet the policy objectives, as well as with subparagraph 1(b)(ii), which requires the Commission to use measures that neither deter economically efficient competitive entry into the market nor promote economically inefficient entry; and
- the requirement set out in paragraph 1(a) of the 2019 Policy Direction that the Commission should consider how its decisions can promote competition, affordability, consumer interests, and innovation.<sup>13</sup>

#### **Cable carriers' application**

58. In their application, the cable carriers requested the following relief:

- (a) review and variance of the methodology and the resulting rates approved for the cable carriers' aggregated wholesale HSA services in Telecom Order 2019-288, in conjunction with the wholesale rate-setting review;
- (b) review and variance of the determination in Telecom Order 2019-288 regarding retroactivity such that any new wholesale rates be applied only on a prospective basis; and
- (c) in the event that the interlocutory stay granted by the FCA is terminated or varied, an interim stay of Telecom Order 2019-288 pending the Commission's determinations regarding (a) and (b) above.

59. Specifically, the cable carriers argued the following:

- Telecom Order 2019-288 violates the statutory rate-setting principle of providing the cable carriers with a reasonable opportunity to recover their costs and a reasonable return on their network investments.
- Given that the Commission has never established separate costing manuals for the cable carriers, as well as the Commission's own recognition that a review

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<sup>12</sup> *Order Issuing a Direction to the CRTC on Implementing the Canadian Telecommunications Policy Objectives*, SOR/2006-355, 14 December 2006

<sup>13</sup> *Order Issuing a Direction to the CRTC on Implementing the Canadian Telecommunications Policy Objectives to Promote Competition, Affordability, Consumer Interests and Innovation*, SOR/2019-227, 17 June 2019

of its approach to wholesale rate setting is both necessary and overdue, the dramatic decreases in the rates for wholesale HSA services gives rise to serious doubts as to the correctness of the methodology and rates approved in Telecom Order 2019-288.

- The determinations in Telecom Order 2019-288 resulted from an ad hoc costing exercise that is divorced from dynamic economic factors and real-world considerations, and fails to recognize several basic principles, including failing to reflect real-world cable carrier networks. The determinations are not competitively or technologically neutral, and do not capture costs of deploying higher speeds.
  - The Commission's determination to introduce a new principle of setting one access rate for each cable carrier's wholesale HSA service is divorced from the reality of a market driven by dynamic pricing by service speed.
  - The Commission's determination to apply rates retroactively fails to take into account the penal nature of the retroactive repayment order on the cable carriers. Furthermore, the lack of any requirement for competitors to compensate their customers is a pure windfall because competitors have already recouped their costs. This constitutes a serious omission and raises substantial doubt as to the correctness of this aspect of Telecom Order 2019-288.
60. According to the cable carriers, when engaged in regulation through rate setting, the Commission is statutorily required to set rates that are just and reasonable and to do so with a view to implementing the policy objectives. They argued that Telecom Order 2019-288 results in artificially and excessively low rates that do not permit the cable carriers to recover their costs and a reasonable rate of return on their very substantial network investments, and contains no assessment of the impact of the revised rates on the policy objectives, including, in particular, an assessment of the impact of those rates on network investment, innovation, and competition.
61. The cable carriers further submitted that there is substantial doubt as to the correctness of approving massive reductions in wholesale HSA service rates on the eve of a review of the Commission's wholesale rate-setting approach.

#### **Determination on stay requests**

62. On 28 September 2020, in Telecom Decision 2020-342, the Commission approved Bell Canada's and the cable carriers' requests to stay the implementation of the final rates established in Telecom Order 2019-288 pending its final determinations on the review and vary requests, which are the subject of the present decision.

## Issues

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

- Is there substantial doubt as to the correctness of the aggregated wholesale HSA service rates set in Telecom Order 2019-288?
- If there is substantial doubt as to the correctness of the aggregated wholesale HSA service rates set in Telecom Order 2019-288, how should that order be varied?
- Other considerations

### **Is there substantial doubt as to the correctness of the aggregated wholesale HSA service rates set in Telecom Order 2019-288?**

## ILEC issues

### Introduction

64. Bell Canada and TCI identified specific errors in fact they claimed the Commission made in Telecom Order 2019-288, which they argued raise substantial doubt as to the correctness of the final rates set in that order. Generally, Bell Canada and TCI argued that the Commission either ignored or misconstrued facts on the record of the associated proceeding, failed to properly apply its own costing principles, or was inconsistent with its own past decisions.
65. While TCI requested that the Commission correct the identified errors, Bell Canada identified the errors to demonstrate that the costing process leading to Telecom Order 2019-288 is broken and fails to produce proper economic costs.
66. The Commission has identified the following major ILEC issues to be addressed in this decision:
- Attribution of costs for digital subscriber line access multiplexer (DSLAM), umbilical fibre, and Ethernet port access facilities
  - DSLAM installation labour costs per port
  - Project development costs
  - Demand-related cost adjustment
  - Unrecovered costs
  - Occurrence rates assigned for manual handling of orders and travel time in the cost study for the bonded access installation charge
  - Exclusion of pole and conduit structure costs in the cost study
  - Repair costs in the bonded access service cost study

## **Attribution of costs for DSLAM, umbilical fibre, and Ethernet port access facilities**

### ***Background***

67. In Telecom Order 2019-288, the Commission determined that, when making investment decisions, setting retail prices, or measuring profitability for services that use DSLAM equipment, umbilical fibre, and Ethernet port access facilities, ILECs do not attribute 100% of these shared facility costs to Internet service alone. Instead, the Commission determined that it would be reasonable to assume that a portion of the shared facility costs would be attributed to each of the services that use the shared facilities.
68. The Commission therefore determined that the service-based attribution factors submitted by each of Bell Canada, Bell MTS, and TCI are to be applied against the ILECs' DSLAM equipment, umbilical fibre, and Ethernet port costs associated with aggregated wholesale HSA service in the estimation of individual service costs.
69. In the absence of company-specific information, the Commission derived a service-based attribution factor for SaskTel using the average of the other ILECs' service-based attribution factors to be applied to relevant costs.

### ***Positions of parties***

70. Bell Canada submitted that the determination in Telecom Order 2019-288 that shared facility costs of DSLAM equipment, umbilical fibre, and Ethernet port access facilities would be attributed to each of the services that use these facilities is a major departure from Phase II costing principles. According to the company, allocating investments to services is similar to the fully allocated costing process whereas Phase II costing is intended to measure prospective incremental costs.
71. Bell Canada further submitted that assigning only a portion of the DSLAM port cost to the competitor when a competitor leases the entire port violates the basic principle of causality, since the use of a unit of the DSLAM's capacity (which is a DSLAM port) to satisfy wholesale demand causes Bell Canada to advance the addition of an entire unit of DSLAM capacity and not a portion of it. Bell Canada argued that as long as umbilical fibre and Ethernet ports are access driven, their characteristics will be the same as DSLAM ports; therefore, it would be inappropriate to apply a service-based attribution factor to these facilities.
72. Bell Canada added that, even if the use of a service-based attribution approach had merit, which it does not, this approach counts the number of services being sold over network access facilities by the ILECs and ignores the number of services being sold by the competitors, thus providing the competitors with an advantage over the ILECs.
73. Bell Canada also submitted that the service-based attribution factor is contrary to the Commission's determinations in Telecom Regulatory Policies 2011-703 and 2011-704, where the Commission did not deem it necessary to apply a service-based attribution factor in the costing of wholesale HSA services.

74. TCI submitted that the Commission erred in fact and in law by departing from economic rate-setting principles through its introduction of a service-based attribution factor applied to the ILECs' access costs. TCI argued that access capital costs do not vary with the number of retail services offered by the company over the same access. As a result, a service-based attribution factor bears no resemblance to company-specific and service-specific costs that are causal, incremental, and prospective, as required by Phase II as outlined in the Regulatory Economic Studies Manual (Manual). TCI further submitted that the service-based attribution approach resulted in the costs of the service being lowered without justification, leading to rates that are not just and reasonable.
75. TCI submitted that the primary requirement to offer Internet service, by either a wholesale HSA service provider or a competitor, is to have access to a DSLAM port. Thus, it is the port that causes the assignment of incremental costs to either type of service provider. TCI further submitted that, once the port is in use by a competitor, TCI is unable to use it, and so the port consumption by the wholesale HSA service represents an opportunity cost for the provisioning of TCI's services. The competitor uses that port to enable Internet connectivity to its end-users and can provide any number of retail services via that connection, such as telephone, Internet, and television.
76. TCI submitted that retail services, other than Internet, included in estimating service-based attribution factors have no causal incremental impact on the access costs, since no additional access costs are incurred when they are provisioned, other than the cost of the original port itself. TCI argued that a service-based attribution approach creates a cross-subsidy from TCI's retail Internet Protocol (IP)-based services other than Internet to the wholesale HSA service, contrary to Phase II methodology.
77. CNOC submitted that the use of a service-based attribution factor is a correct application of Phase II costing principles in the valuation of capital associated with a shared facility. According to CNOC, the valuation of capital associated with a shared facility to be included in the regulatory economic study must include the impact of using a portion of the capacity of the shared facility by the service, as indicated in section I-27 of Bell Canada's Manual.
78. CNOC argued that the ILECs' proposed costing approach does not ensure competitive equity because other retail IP-based services delivered by the wholesale HSA service provider to its retail subscribers using the access network are not factored in the development of the unit costs of the access equipment and facilities.
79. CNOC further submitted that, in Order 2000-789, the Commission determined that certain costs incurred by the cable carriers in their access studies, such as node segmentation and bi-directionality capital costs, were also incurred to permit them to offer other services. On this basis, the Commission approved service attribution.

80. Bell Canada replied that, in the case of DSLAM equipment, the wholesale HSA service uses an entire port of the DSLAM, and the port is not shared between the service provider and wholesale service customers. As a result, based on the Manual, the full cost of the port should be included in the wholesale cost study. Bell Canada submitted that it is clear that, where an asset is not shared, it should not be subject to an attribution factor at all.
81. TCI further submitted that, based on paragraph 231 of Telecom Order 2019-288, any future revenue-producing IP-based services would be included in the reassessment of the attribution factor in subsequent study periods. Such an approach will discourage innovation and efficiency because any economically beneficial actions taken by the wholesale HSA service provider to offer new IP-based services over the same retail HSA service would result in penalizing the wholesale HSA service provider through a lower wholesale rate when the factor is reassessed in future study periods.
82. TCI claimed that, when the company offers additional Internet protocol television (IPTV) services installed via the same access as the retail customer's home Internet service, any end-users of service provided through wholesale HSA service in the same service area are unaffected because the non-usage-sensitive facilities dedicated to their HSA service are separate. However, based on Telecom Order 2019-288, the wholesale HSA service rate would be lowered because the costs are distributed over more services.
83. With regard to CNOC's argument, TCI noted that in Telecom Decision 2006-77 the Commission applied an attribution factor to the cable carriers' node segmentation costs to share equipment costs across wholesale HSA and retail services, since costs could not be exclusively assigned to either wholesale or retail services. However, in the present case, TCI's access capital costs can be readily divided into discrete increments since retail HSA and wholesale HSA services are provided over separate ports, and their costs could be readily estimated.
84. TCI submitted that the relevant investment decision the company makes is whether to invest in the access facility infrastructure, not whether to invest in individual retail services per se. Thus, contrary to the Commission's reasoning in Telecom Order 2019-288, TCI's standard investment assumption is indeed to attribute 100% of the shared facility costs to Internet service.

***Commission's analysis and determinations***

85. Competitors, as well as ILECs, access their respective subscribers through the DSLAM port, using one port per subscriber per service provider. Further, once a competitor leases a DSLAM port, that port is no longer available to the ILEC, which would need to access another port to provide its own retail services to the subscriber. An ILEC may offer more than retail Internet service (e.g. IPTV or voice service) to one of its own retail subscribers; however, since the additional services of that subscriber would be provided over the same port, this would not result in any causal incremental impact on the access costs. In other words, it is the number of

subscribers per service provider and not the number of services they subscribe to that causes the need to use another port of a DSLAM and eventually results in the installation of a new DSLAM to meet future demand.

86. In the case of the ILECs, DSLAM technology easily allows for separating the costs between retail and wholesale services based on the relative number of ports used for these different services. Therefore, it is not necessary to use an attribution factor in the case of the ILECs to estimate wholesale HSA service costs.
87. Based on the service-based attribution approach to assigning wholesale service costs as determined in Telecom Order 2019-288, a competitor that uses an entire DSLAM port and offers retail Internet service to one of its subscribers would have to pay certain ILECs, for example, only 68.8% of the cost of a port as determined in that order.
88. In the Commission's view, there are two issues associated with the above approach: (i) since the competitor would pay only a portion of the cost of the port it leases, the ILEC would not be able to recover the entire cost of this leased port directly since the ILEC will not have access to that port to offer its own retail services; and (ii) since the competitor would be free to offer other retail services to that subscriber at no additional cost for the use of that port, it would put the ILEC at a competitive disadvantage. Thus, using the service-based attribution approach to assign wholesale service costs would result in a cross-subsidy from the ILEC to the competitor, which is against Phase II costing principles.
89. Upon further review, the Commission also considers that another drawback of the service-based attribution approach is that it lends itself to the inclusion of future revenue-producing IP-based services in the reassessment of the service-based attribution factor in subsequent study periods. As a consequence, there is a risk that it will dampen any incentive the ILEC may have to innovate and introduce new services, since each additional innovative service introduced by the ILEC would automatically decrease the competitor's cost per port. In essence, it would result in an environment that would be contrary to the Commission's objective to encourage sustainable competition primarily through facilities-based competition.
90. Further, in approving a service-based attribution approach to assign wholesale service costs, the Commission made its determination assuming that, when an ILEC makes an investment decision and sets retail prices and measures profitability, it would not attribute 100% of the shared facility costs to Internet service only.
91. Upon further review, the Commission considers that the evaluation of wholesale service facility costs should generally not be influenced by an ILEC's investment decisions, retail prices, or measures of profitability. Instead, the evaluation of wholesale service facility costs should, in general, be based on Phase II costing methodology as prescribed in the Manual.

92. In the Commission's view, how an ILEC manages its own services internally is generally inconsequential to the approach used by the Commission to regulate the wholesale service market. An undesired consequence of establishing wholesale service prices based on methodologies used by the ILECs to set their own retail prices, on a going-forward basis, would require each ILEC to file information on their respective approaches related to internal business decisions, such as investment decisions and pricing of retail services. In the Commission's view, this is unwarranted.
93. While the Commission has historically approved the application of attribution factors for the cable carriers, the underlying technology used in the provisioning of the cable carriers' wholesale HSA services is very different from that used by ILECs. In the case of the cable carriers, a single coaxial facility carries and shares the information (e.g. retail Internet and television, as well as wholesale services) sent by a number of subscribers to an optical node for further transmission.
94. The Commission therefore considers that it erred in its determination in Telecom Order 2019-288 in using service-based attribution factors to set wholesale HSA service rates for the ILECs because it violates the basic principles of estimating Phase II costs.
95. The Commission therefore determines that there is substantial doubt as to the correctness of its determination to use the service-based attribution approach to estimate the causal costs related to the ILECs' wholesale HSA services.

#### **Bell Canada and Bell MTS – DSLAM installation labour costs per port**

##### ***Background***

96. A DSLAM is a network traffic distribution device that aggregates individual subscriber lines into a high-capacity uplink. These high capacity uplinks (Gigabit Ethernet) connect subscribers to the wholesale HSA service provider's switch located in a CO. DSLAM units are typically located in COs or in outside-plant distribution points.
97. In Telecom Order 2019-288, the Commission reduced Bell Canada and Bell MTS's proposed DSLAM installation labour costs per port by more than 50%, based on the average of the DSLAM installation labour costs per port for SaskTel and TCI. The Commission noted that DSLAM equipment is a mature technology that has been in service for a long time and provides similar functionality and capacity across all ILECs. The Commission therefore determined that Bell Canada and Bell MTS's proposed DSLAM installation labour costs per port should be revised to be consistent with those of other ILECs, and considered that an average of the other two ILECs' DSLAM installation labour costs per port would be a reasonable proxy for these costs.

### ***Positions of parties***

98. Bell Canada submitted that the Commission's above determination is unreasonable and has no merit since the Commission did not undertake a detailed assessment of the differences in the key drivers of different ILECs' DSLAM installation labour costs per port.
99. In support of its position, Bell Canada submitted that the Commission's determination was a departure from Telecom Order 2008-237, in which the Commission stated that ILECs should use their company-specific costs. Bell Canada further submitted that DSLAM installation labour costs per port could vary among ILECs, given that there are different types and configurations of DSLAMs, as well as variability in location, geography, population, and municipal rules.
100. Bell Canada submitted that its DSLAM installation labour costs per port consist of the company's internal labour costs as well as the actual billed amounts for external contractors, and that the external contract labour cost per port itself is higher than the cost per port approved in Telecom Order 2019-288 (as estimated by Bell Canada).
101. Bell Canada argued that neither SaskTel nor TCI filed any information on the public record to allow for a comparison of different DSLAM installation labour costs per port between companies, and that differences in costs could also arise based on how ILECs categorize their costs into accounts, as well as whether certain types of costs are classified as capital or expense.
102. CNOC supported the Commission's determination and submitted that DSLAM equipment is a mature technology that provides similar functionality and capacity across all ILECs, so these characteristics render it well suited for benchmarking. They argued that DSLAM installation labour costs per port reported by Bell Canada, which are significantly higher than those reported by other ILECs, are not reasonable, as confirmed in Telecom Order 2019-288. CNOC further argued that Bell Canada failed to demonstrate (i) that the Commission lacked enough detail regarding other ILECs' DSLAM configurations to provide a valid cost comparison, and (ii) that the Commission erred in its determinations with respect to the DSLAM installation labour costs per port.
103. Bell Canada replied that no intervener discredited the information it had filed indicating that the approved DSLAM installation labour costs per port are lower than what the company pays to third parties based on actual recorded payments.

### ***Commission's analysis and determinations***

104. In Telecom Order 2008-237, the Commission approved the ILECs' respective Manuals, including the specific costing methodologies proposed therein. Bell Canada's Manual states that the company's equipment installation costs include costs associated with its own internal labour as well as contractor-related costs.

105. The Commission considers that Bell Canada has raised reasonable doubt as to the correctness of the determination in Telecom Order 2019-288 regarding Bell Canada's and Bell MTS's DSLAM labour installation costs per port, considering that Bell Canada's external contract labour costs per port filed in support of their original proposal are higher than the final costs per port approved in that order.
106. The Commission is also of the view that it may not be appropriate to compare different ILECs' DSLAM installation labour costs per port, since each of these companies used different types of inputs and methodologies to arrive at their company-specific costs. For example, Bell Canada proposed its DSLAM installation labour costs per port based on the company's actual contract and internal labour costs, whereas TCI estimated its DSLAM installation labour costs per port based on an average labour-to-material cost ratio derived from company-specific corporate data.
107. The Commission considers, therefore, that Bell Canada's and Bell MTS's proposed DSLAM installation labour costs per port should be reviewed on their own merit for validity. In this regard, the Commission notes that the costing inputs and methodology used by Bell Canada are consistent with the Manual approved by the Commission. Given this, the Commission considers that it is inappropriate to replace Bell Canada's and Bell MTS's proposed DSLAM installation labour costs per port with costs based on other ILECs' methodology and cost data.
108. Based on the above, the Commission determines that there is substantial doubt as to the correctness of the determination to deny Bell Canada's and Bell MTS's proposed DSLAM installation labour costs per port and instead use of an average of SaskTel's and TCI's DSLAM installation labour costs per port.

#### **Bell Canada – Project development costs**

##### ***Background***

109. During the proceeding that led to Telecom Regulatory Policy 2011-703, Bell Canada submitted project development costs associated with two projects: (i) the development of wholesale residential HSA FTTN service, and (ii) upgrading the company's access network conditioning<sup>14</sup> to provide HSA service.
110. In the proceeding that led to Telecom Order 2019-288, Bell Canada proposed to include a portion of its project development costs to offer a disaggregated wholesale HSA service (Bell Canada referred to this service as disaggregated broadband service or DBS), which included modifying its existing aggregated HSA service systems.

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<sup>14</sup> Network Conditioning refers to the modifications Bell Canada made for a more reliable and stable network to improve the quality of data services over a copper local loop, which is the cable that connects an end-user to the company's DSLAM equipment.

111. In Telecom Order 2019-288, the Commission determined that Bell Canada's DBS project development costs should be recovered through the company's disaggregated and aggregated FTTN monthly access rates and through its disaggregated FTTP monthly access rates. However, the Commission rejected Bell Canada's proposed project development costs, stating that (i) the costs were significantly higher than those allowed for the company's aggregated wholesale HSA service in Telecom Regulatory Policy 2011-703, and (ii) the company did not provide sufficient evidence to support its submission regarding a significant portion of the total project development costs related to contractors and suppliers.
112. In Telecom Order 2019-288, the Commission also decided that Bell Canada's proposed project development costs were unreasonable since the system changes required to implement DBS could be accomplished by leveraging and updating the company's existing systems that support its aggregated wholesale HSA service. The Commission therefore approved project development costs of an amount equal to 50% of the project development costs allowed by the Commission when it approved the rates for Bell Canada's aggregated wholesale HSA service in Telecom Regulatory Policy 2011-703.

***Positions of parties***

113. Bell Canada submitted that it had incurred project development costs to introduce DBS. It argued that in rejecting its proposed project development costs, the Commission inappropriately allowed only 50% of the costs it allowed in Telecom Regulatory Policy 2011-703 that were associated with FTTN network deployment, instead of allowing the full proposed project development costs for DBS. Bell Canada submitted that the disallowance of these costs in Telecom Order 2019-288 was in violation of Phase II costing principles, especially since no related project development costs were approved by the Commission in Telecom Regulatory Policy 2011-703.
114. Bell Canada submitted that, during the proceeding that led to Telecom Order 2019-288, the company had filed a detailed document with 23 pages of information on project development costs as evidence, including comprehensive descriptions of the DBS projects and a breakdown of the incurred costs by Information Systems / Information Technology (IS/IT) domains or functional areas, including assignment of such costs as capitalized or expensed costs. Bell Canada further submitted that it had also provided extensive detail on the type of DBS project development work the company had to undertake in the context of the various DBS rate elements in order to assign a portion of the costs. In addition, the company provided details on the related costs in its associated electronic cost models.
115. Bell Canada submitted that the determination in Telecom Order 2019-288 that the company's proposed project development costs are unreasonable, since it simply leveraged and updated the company's existing systems, is incorrect because the company did not file on the record of the proceeding that led to that order, or in any prior proceeding, the original cost of the systems that it had to augment or modify to launch DBS.

116. Bell Canada added that the project development costs are also captured in its financial results that are reported publicly and relied on, in part, by creditors and the investment community.
117. Bell Canada was also concerned that the Commission simply dismissed all data provided with a claim that it was not enough, and with no valid explanation of what was missing. Instead, the Commission selected an arbitrary number with which to replace the company's actual project development costs.
118. Bell Canada further submitted that, during discussions with Commission staff after Telecom Order 2019-288 was issued, the company was informed that the project development costs approved by the Commission were amortized over 10 years instead of 5 years as proposed by Bell Canada. Bell Canada stated that this information was not in Telecom Order 2019-288, and that it should have been included.
119. Allstream submitted that Bell Canada has been more than adequately compensated for its costs related to wholesale DBS (given that competitors are unable to compete at existing interim rates, allowing Bell Canada to profit by monopolizing the booming retail demand), and that no additional compensation is justified.
120. CNOC submitted that Bell Canada did not submit any evidence to demonstrate that the Commission erred in its adjustments to the company's proposed project development costs, arguing that these adjustments are fully justified for the reasons outlined in Telecom Order 2019-288. CNOC further submitted that Bell Canada's project development costs not only leverage and update current systems, but are also beneficial to other services.
121. Distributel submitted that the issues raised by the incumbents in their respective review and vary applications are essentially the same arguments they presented during the proceeding that led to Telecom Order 2019-288. It submitted that the Commission should not allow the incumbents to improperly delay the implementation of Commission decisions that are unfavourable to them.

***Commission's analysis and determinations***

122. The Commission acknowledges that in Telecom Regulatory Policy 2011-703, it approved certain network development costs associated with modifications to Bell Canada's access network (i.e. network development conditioning costs). Upon review, the Commission notes that Bell Canada did not file evidence in that proceeding regarding the initial cost of the systems and that the Commission did not approve any project development costs similar or related to the project development costs proposed by Bell Canada and assessed in Telecom Order 2019-288. The Commission also notes that Bell Canada's proposed project development costs for DBS are mainly associated with changes required to its systems to provide services such as order fulfillment, service assurance, and billing, and are entirely different than the network development conditioning costs allowed in Telecom Regulatory Policy 2011-703.

123. The Commission further acknowledges that, in the proceeding that led to Telecom Order 2019-288, Bell Canada provided the Commission with a breakdown and explanations of its proposed project development cost elements, including the recording of such costs as capital or expense in a report as well as in its costing models. In addition, Bell Canada submitted in its review and vary application that the company uses these costs as part of its publicly reported financial results. In the Commission's review, such specific detail further appears to give credibility to the company's submission, and is sufficiently persuasive to raise reasonable doubt as to the Commission's determination to reject Bell Canada's proposed project costs in Telecom Order 2019-288.
124. While the Commission had amortized Bell Canada's project development costs over a 10-year period, instead of the 5-year period proposed by the company, the Commission notes that in Telecom Order 2019-288 it inadvertently failed to disclose the amortization period it used in estimating the final rates. While the Commission acknowledges this omission, it does not consider the omission to amount to substantial doubt as to the correctness of the use of a 10-year amortization period, because such a period is consistent with its determination in Telecom Regulatory Policy 2011-703 regarding project development costs.
125. The Commission therefore determines that there is substantial doubt as to the correctness of its determination to deny Bell Canada's proposed project development costs for DBS and allow only a portion of these costs.

#### **TCI – Demand-related cost adjustment**

##### ***Background***

126. When a wholesale service provider files a proposed rate for a service, it typically files a supporting Phase II cost study. The cost study includes an estimated forecast of the expected demand over the study period, as well as the resources to support this demand (e.g. associated costs of capital as well as expenses). These resources are represented as cash flows for each year of the study period. These cash flows vary year over year based on the demand forecast for that year. TCI's review and vary application in this proceeding pertains to the treatment of capital cash flows in its cost study in establishing flat-rate monthly access rates for its wholesale HSA service.
127. In the proceeding that led to Telecom Order 2019-288, in estimating monthly rates for its aggregated wholesale HSA service, TCI proposed to set the timing of all demand-related capital cash flows in its cost study as one-time. In Telecom Order 2019-288, the Commission determined that the timing of the demand-related capital cash flows in the cost study should be treated as ongoing because these expenditures occur throughout the year. The Commission adjusted TCI's proposed rates accordingly.

### ***Positions of parties***

128. TCI argued that in modifying the company's costs, the Commission erred in the treatment of both the one-time and ongoing capital-related cash flows, resulting in lower rates for the company's aggregated wholesale HSA service.
129. TCI submitted that Telecom Order 2019-288 should be varied to reflect the practical timing of capital cash outflows required to support both existing and new subscribers of the aggregated wholesale HSA service.
130. TCI submitted that capital cash flows associated with existing in-service demand should be recognized entirely at the start of the study period since that is when the demand will be satisfied. In adjusting TCI's cash flows from one-time to ongoing, the Commission incorrectly delayed the capital cash outflows associated with existing demand by an average of six months.
131. Regarding capital cash flows associated with growth in demand over the study period, TCI submitted that the timing of cash flows should allow for the lead time required to purchase and install capital equipment. In adjusting TCI's cash flows from one-time to ongoing, the Commission incorrectly delayed the cash outflows for capital equipment to when the actual growth in demand occurred, instead of when the company actually incurred such costs.
132. TCI submitted that it calculates the growth in demand of the service for each year as the difference between its year-end demand for the current year and the year-end demand for the previous year. TCI assumed that the average incremental growth in demand for the service would occur during the middle of the current year, instead of throughout the year on a uniform basis. Under this assumption, cash flows are brought six months ahead, as a one-time cash flow, to the beginning of each year in recognition of the lead time required to purchase equipment ahead of using it to provide service.
133. CNOC submitted that, contrary to TCI's claim, the definition of a capital expenditure cash flow in the Manual clearly details that the capital cash flow must be timed with the use of the service instead of when the cost is actually incurred prior to the study period. According to CNOC, TCI's inappropriate advancement of capital cash flows by six months in each 12-month period of a multi-year service cost study has the effect of inflating costs and increasing the corresponding rates above just and reasonable levels.
134. CNOC noted that, under Phase II methodology, capital cash flows associated with existing service demand present at the start of the study period are included at the beginning of the first year of the study period, and capital cash flows associated with growth demand over a 12-month period should be included as occurring during the mid-year. This is because the beginning of the study period is when existing demand is satisfied, while growth demand is averaged to 1 July of the study year in question (mid-year). The consequence of combining existing and growth demand during the first year of the study period would be an inappropriate distortion of the timing of the model's capital cash flows such that Phase II costs are overstated.

135. With regard to CNOC's submission that TCI's approach to capital cash flow timing associated with incremental demand is inconsistent with the Manual, TCI replied that the Glossary in Appendix F of the Manual defines "Capital Cash Flow" as the cash flows associated with capital expenditures, and defines "Cash Flow" itself as the flow of money either out of or into the company. Based on these definitions, TCI submitted that the cash outflows occur when an asset is purchased by the company, and not "at the time" when it is used.
136. TCI also submitted, however, that the above definition of "Cash Flow" is internally inconsistent with the definition of "Capital Expenditure" in Section 1-13 of the Manual, where "Capital Expenditure" is defined as the cash outflow associated with the use of an asset by the service under the proposed course of action.
137. Based on the above, TCI submitted that CNOC's interpretation of its statement is in error and not in accordance with the content and overall intent of the Manual. Rather, TCI's cost study method is in full compliance with the directions in the Manual.

#### ***Commission's analysis and determinations***

138. The Commission notes that the demand for the service at the beginning of the study period reflects the in-service demand of existing subscribers. These subscribers already have the service, which means the service is already provisioned. Treating this demand as ongoing, as determined in Telecom Order 2019-288, would reflect that the service is being provisioned throughout the year, which is not correct.
139. In regards to growth in demand over the study period, the Commission notes that subsection 1.2.2 (1-13) of the Manual defines a capital expenditure as the cash outflow associated with the use of an asset by the service under the proposed course of action. Subsection 1.2.2 (1-14) of the Manual clarifies this definition further by stating, "Capital expenditure is the cash outflow at the time an asset is used by the service under the proposed course of action." Thus, even if the actual cash flow occurs at the time of purchase of the equipment, with Phase II, the timing of the cash flow is recognized only when that asset is put into service.
140. The Commission therefore determines that there is substantial doubt as to the correctness of its treatment of TCI's capital cash flow for aggregated wholesale HSA service at the beginning of the study period as ongoing instead of as one-time.
141. However, the Commission determines that there is no substantial doubt as to the correctness of its treatment of TCI's capital cash flow for aggregated wholesale HSA service's growth in demand over the study period as ongoing.

#### **Bell Canada – Unrecovered costs**

##### ***Background***

142. In its cost studies filed in the proceeding that led to Telecom Order 2019-288, Bell Canada proposed to include its unrecovered causal costs under both its non-bonded and bonded wholesale HSA services, based on Commission directives in Telecom Regulatory Policy 2009-274 and Telecom Decision 2016-117.

143. The Commission, however, noted that in estimating its demand-related unrecovered costs in its CBB cost study, Bell Canada used an annual unit cost change assumption of minus 10% for usage-sensitive equipment. The Commission was of the view that, had Bell Canada instead used a unit cost change assumption of minus 26.4%, as determined in Telecom Decision 2016-117, this would have resulted in an over-recovery of costs causal to demand in its CBB cost study, instead of under-recovery as proposed by Bell Canada.
144. Therefore, in Telecom Order 2019-288, the Commission determined that the total unrecovered costs proposed by Bell Canada were not reasonable and disallowed the company from including any unrecovered costs that are causal to service as well as unrecovered costs that are causal to demand.

***Positions of parties***

145. Bell Canada argued that the Commission's rationale in rejecting the company's proposed unrecovered causal costs in its cost study is flawed and based on factual errors. In support, Bell Canada submitted that its own assessment, using an annual unit cost change assumption of minus 26.4% as suggested by the Commission in Telecom Order 2019-288, continued to show an under-recovery of costs causal to demand in its CBB cost study, instead of the over-recovery as stated by the Commission.
146. Bell Canada further submitted that, even if an over-recovery of costs occurred in one cost study (i.e. CBB), this should not be used as the basis for denying the company the ability to recover the unrecovered costs associated with its access service cost study.
147. CNOC submitted that in Telecom Order 2019-288, the Commission determined that the unrecovered causal to service costs and unrecovered causal to demand costs filed by Bell Canada are not reasonable, since the company did not consider any over-recovery of costs associated with these cost elements. CNOC argued that Bell Canada failed to substantiate this issue in its review and vary submission.
148. CNOC further submitted that the calculation of unrecovered causal to service costs filed by Bell Canada during the proceeding that led to Telecom Order 2019-288 does not follow the methodology specified in Appendix E-1 of the Manual. CNOC added that, in reference to Bell Canada's estimation of the unrecovered costs causal to service, the inclusion of ongoing product management expenses and the restatement of the unrecovered costs to the beginning of the study period are inconsistent with the requirements of the Manual in estimating such costs.

***Commission's analysis and determinations***

149. While Bell Canada argued that its own analysis using an annual unit cost change assumption of minus 26.4% as suggested by the Commission in Telecom Order 2019-288 continued to show an under-recovery of costs causal to demand in its CBB cost study, the company did not submit evidence in its review and vary application

demonstrating what amount would still remain unrecovered or how it calculated those numbers. Instead, Bell Canada only argued for the inclusion of unrecovered causal to service costs in its access service cost study.

150. The Commission considers that the main issue raised by Bell Canada in its application is whether or not it is appropriate to combine the under- or over-recovery costs of two different cost studies.
151. Upon review of Bell Canada's review and vary application, the Commission considers that its finding in Telecom Order 2019-288, based on combining the under- or over-recovery of costs of two different cost studies, is incorrect. Under Phase II costing principles, rates in access cost studies and CBB cost studies should be evaluated independently, and each cost study should evaluate rates based on the causal costs associated with that cost study only.
152. This approach is consistent with Telecom Regulatory Policy 2009-274, where the Commission determined that, since tariffed rates for mandated wholesale services are generally established on a per-demand unit basis, the unrecovered or over-recovered introduction costs should be evaluated based on the yearly demand forecasts of each cost study separately. In Telecom Regulatory Policy 2009-274, the Commission did not require the unrecovered or over-recovered costs of different cost studies to be combined.
153. The Commission therefore determines that there is substantial doubt as to the correctness of its determination to deny the inclusion of Bell Canada's unrecovered causal to service costs as proposed.

**Bell Canada – Occurrence rates assigned for manual handling of orders and travel time in the cost study for the bonded access installation charge**

***Background***

154. In Telecom Regulatory Policy 2011-703, the Commission approved various rates for aggregated wholesale residential HSA services, including those delivered over FTTN facilities. One of the rates that was approved was Bell Canada's installation service charge, which is designed to cover the one-time costs associated with various activities the company needs to perform to offer aggregated wholesale HSA services.
155. Bell Canada provides two classes of FTTN HSA services: (i) non-bonded access service, and (ii) bonded access service. While the non-bonded access service requires only a single pair of copper wires to access the FTTN network, the bonded access service requires two pairs.
156. Telecom Regulatory Policy 2011-703 dealt only with the non-bonded access service, because Bell Canada did not start offering the bonded access service until 2017. Telecom Order 2019-288 dealt with both non-bonded and bonded access services.

157. For both bonded and non-bonded access services, Bell Canada performs several activities to provide service to the subscriber. Two such activities that are relevant in Bell Canada's review and vary application with respect to its bonded access service installation charge are (i) processing the order when a subscriber requests the service, and (ii) travel time associated with an installer who travels to the site to activate the bonding that is necessary to provide the service.

***Positions of parties***

158. Bell Canada submitted that, in the cost study it filed in the proceeding that led to Telecom Regulatory Policy 2011-703, the company proposed that 20% (the occurrence rate) of the order processing activities for the installation of FTTN HSA services would be handled manually by its labour force and included this cost in its cost study as a separate cost element. The Commission, however, reduced this occurrence rate by 40% (to a final rate of 12%) to take into account orders for customer locations that already have FTTN and will not require these work activities.

159. Bell Canada added that, in Telecom Regulatory Policy 2011-703, the Commission also set the travel time occurrence rate associated with Bell Canada's installation of FTTN HSA service at 12% to take into consideration certain adjustments, such as customer locations that already have FTTN and will not require these work activities.

160. Bell Canada submitted that, in the cost study for its bonded access service installation charge that was filed in the proceeding that led to Telecom Order 2019-288, the company proposed an occurrence rate of 60% for each of its manual order processing and travel time activities. According to Bell Canada, this 60% rate reflected a 40% reduction from the 100% rate applicable to its bonded access service, so as to be conservative and consistent with the Commission adjustments made in Telecom Regulatory Policy 2011-703. However, in Telecom Order 2019-288, the Commission reduced these occurrence rates by 80% (to a final rate of 12%), because Bell Canada did not provide any specific evidence to demonstrate why its proposed occurrence rates for these activities deviated from those established previously in Telecom Regulatory Policy 2011-703.

161. Bell Canada argued that the Commission's adjustments of the company's actual demand levels for manual order processing and travel time activities in Telecom Order 2019-288 are in error and not justified. In support, the company submitted that, for its bonded access service installation, unlike its non-bonded access service installation, order processing is done manually 100% of the time. Similarly, every bonded access service installation requires a field visit (i.e. travel). Therefore, the travel time occurrence rate should also be 100%.

162. CNOC submitted that the Commission should reject Bell Canada's proposed 100% occurrence rate for each of the manual order processing and travel time activities since the occurrence rates of these activities approved by the Commission in Telecom Order 2019-288, along with the time estimates per order assigned to each of these activities, yield a much more realistic estimate.

### ***Commission's analysis and determinations***

163. Upon further analysis of Bell Canada's review and vary application as well as the associated costing models, the Commission finds that Bell Canada, in its original cost study, had already incorporated a 40% reduction for each of its manual order processing and travel time activities to be consistent with the adjustments the Commission made in Telecom Regulatory Policy 2011-703. The estimation of these occurrence rates are based on differing underlying assumptions; therefore, the Commission considers that it is incorrect to reduce the proposed occurrence rates to 12% to match the values used in Telecom Regulatory Policy 2011-703.
164. The Commission, upon further review, considers that Bell Canada's costing model evidence, including the adjustments reflected in the costing models submitted during the proceeding that led to Telecom Order 2019-288, were reasonable and appropriate and sufficiently persuasive to explain why the occurrence rates should differ from those in Telecom Regulatory Policy 2011-703.
165. The Commission therefore finds that there is substantial doubt as to the correctness of the determination to deny Bell Canada's proposed occurrence rates for manual order processing and travel time activities for its bonded access service installation charge.

### **Bell Canada – Exclusion of pole and conduit structure costs in the cost study**

#### ***Background***

166. Bell Canada recovers its costs of providing wholesale HSA services mainly through two different rates: (i) the monthly access rate, and (ii) the monthly CBB rate. In the original cost study filed by Bell Canada as part of the proceeding that led to Telecom Order 2019-288, the company proposed to capture the umbilical fibre costs incurred in providing the service through its CBB rate, since this cost is usage sensitive (i.e. the cost varies with the use of the service).
167. In Telecom Order 2019-288, the Commission rejected Bell Canada's proposal to recover the umbilical fibre costs in its monthly CBB rate and instead determined that these costs should be recovered in the company's access service rate. To effect this change, the Commission modified Bell Canada's cost models by transferring the umbilical fibre costs and the associated structure costs (e.g. pole and conduit structures' support transmission lines) from the CBB model to the access model.

#### ***Positions of parties***

168. Bell Canada submitted that, to reflect the above determination, the Commission modified the company's cost models to transfer the umbilical fibre and the structure costs associated with poles and conduit from the CBB cost model to both its non-bonded and bonded access service cost models. In doing so, the Commission, in error, forgot to include the costs associated with the structures (poles and conduit) in

the company's access service cost models.<sup>15</sup> According to Bell Canada, this omission led to an understatement of the costs, and, accordingly, the rates of both of these access services.

169. CNOC argued that Bell Canada's above submission was based on its private conversation with Commission staff and that private discussions between an applicant and Commission staff do not constitute valid evidence in support of a request for relief by way of a Part 1 application, since such evidence could not be verified or challenged by interested parties. CNOC submitted that Bell Canada has not established that the Commission erred with respect to its treatment of pole and conduit structure costs.

170. Bell Canada replied that CNOC's argument has no merit since it is a fact that the Commission inappropriately excluded pole and conduit structure costs when it adjusted the non-bonded and bonded access service cost models to set monthly rates in Telecom Order 2019-288.

#### ***Commission's analysis and determinations***

171. The Commission has reviewed Bell Canada's cost models and notes that the company has successfully excluded the umbilical fibre cost, including the associated pole and conduit structure costs, from the CBB model as determined by the Commission. However, in transferring these costs to the company's non-bonded and bonded access service cost models, the Commission appears to have inadvertently missed transferring the associated structure costs as well, resulting in the underestimation of the access costs of these services.

172. The Commission further considers that Bell Canada has established on the record of this proceeding that those associated costs should be included in the company's access cost models.

173. The Commission therefore finds that there is substantial doubt as to the correctness of its determination with respect to Bell Canada's non-bonded and bonded access service rates, given that they were incorrectly calculated due to the exclusion of costs of the associated pole and conduit structures.

#### **Bell Canada – Repair costs in the bonded access service cost study**

##### ***Background***

174. In estimating the proposed monthly cost for its bonded access service, Bell Canada included a repair activity cost element of its digital subscriber line (DSL) access facilities assuming that 100% of the repair work required in its plant is carried out by external contractors.

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<sup>15</sup> Bell Canada submitted that it became aware of this issue based on a discussion the company had with Commission staff related to the replication of the costs after Telecom Order 2019-288 was released.

175. In Telecom Order 2019-288, the Commission reduced the repair activity occurrence rate from the proposed 100% to 8%, to be consistent with the occurrence rate of 8% submitted by Bell Canada for its non-bonded access service. In support of this reduction, the Commission stated that Bell Canada did not provide any company-specific evidence to demonstrate why the occurrence rate for the bonded access service deviated for the same activity for its non-bonded access service.

***Positions of parties***

176. Bell Canada submitted that the adjustment made in Telecom Order 2019-288 is incorrect because, in the case of its bonded access service, 100% of the repair work is done by external contractors and none by Bell Canada technicians. However, in the case of its non-bonded access service, 8% of the repair work is performed by internal Bell Canada technicians and 92% is carried out by external contractors. According to Bell Canada, this breakdown matters because the costs associated with the internal Bell Canada labour are different from the costs the company pays to contractors.

177. Bell Canada further submitted that the Commission, by reducing the occurrence rate of this repair-related cost component from 100% to 8%, did not account for the remaining 92% of the costs related to repair work by the company, thereby incorrectly reducing its repair costs for the access facilities.

***Commission's analysis and determinations***

178. Upon further review, the Commission notes that Bell Canada, in its non-bonded and bonded access service costing models, expressed the total repair activity to be done for each of these services to be 100%. The models then identify the different labour forces carrying out these repair activities on a percentage basis in order to estimate the associated costs.

179. The cost models submitted by Bell Canada in the proceeding that led to Telecom Order 2019-288 further show that the company calculated its repair costs for non-bonded access service based on 8% of the repair activity being done by internal Bell Canada technicians and the remaining 92% by external contractors. In the case of its bonded access service, the cost models show that 100% of the repair activity is done by external contractors. However, in Telecom Order 2019-288, the Commission approved only 8% of the repair activity for bonded access service as being done by external contractors, and no costs were assigned to the remaining 92% of the repair work. Upon further review, the Commission considers the above determination to be in error and should be corrected.

180. In light of the above, the Commission finds that there is substantial doubt as to the correctness of its determination to deny Bell Canada's proposal to use a 100% occurrence rate for repair costs associated with external contractors in Bell Canada's bonded access service cost study.

## **Cable carrier issues**

### **Introduction**

181. The cable carriers' review and vary application included broad concerns relating to the methodology used to set their aggregated wholesale HSA service rates. The cable carriers argued that these concerns reflected errors in fact and principles that raised substantial doubt as to the correctness of the methodology and, as a result, of Telecom Order 2019-288. The cable carriers, however, generally did not provide detailed evidence to reflect specific costing errors or omissions in the application of that methodology, nor did they provide costing evidence to support their position.

182. To ensure that its determinations in Telecom Order 2019-288 were consistent with past Commission decisions, adhered to the Manual, and did not include errors or omissions, the Commission reviewed determinations applicable to the cable carriers.

183. In doing so, the Commission identified (i) concerns that raise doubt as to other specific determinations in Telecom Order 2019-288, for which the Commission would require further information to complete the resolution of the related costing issues; and (ii) determinations that result in errors that support the broad arguments raised by the cable carriers. These issues are discussed below.

184. The Commission identified the following major cable carrier issues to be addressed in this decision:

- Setting one access rate for each cable carrier's wholesale HSA services
- Explicit costs
- Costing methodology for new and existing coaxial facilities
- Attribution factor for Converged Cable Access Platform (CCAP) facilities
- Videotron – Application of working fill factor (WFF) to CCAP unit costs
- Shaw – Discount factor

### **Setting one access rate for each cable carrier's wholesale HSA services**

#### ***Background***

185. In Telecom Decision 2016-117, the Commission determined that wholesale HSA service providers, whether they are using the CBB model<sup>16</sup> or the flat-rate billing

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<sup>16</sup> The CBB model includes three components: (i) a monthly access rate for each of the competitor's retail customers; (ii) a monthly capacity charge, offered in increments of 100 Mbps; and (iii) ancillary charges.

model,<sup>17</sup> must ensure that all equipment costs accounted for in the access portion of their cost models included only costs for non-usage-sensitive equipment.

186. Further, in Telecom Decision 2016-117, the Commission determined that rate setting for all wholesale HSA services is to be done in accordance with the speed-banding approach. This approach results in the adoption of two access components that, combined, make up the access rate.
187. The first access component consists of a speed-independent weighted-average access rate applied to all service speed offerings. The second access component consists of a speed-dependent access cost per speed band uniformly applied to all service speeds falling within a given speed band. Each speed band is determined based on service speeds that have similar costs.
188. In Telecom Order 2019-288, the Commission considered that segmentation fibre was demonstrated to be deployed to address usage requirements and not to respond to the speed requirements of new services.
189. The Commission further considered that coaxial facility costs do not vary by speed band because the coaxial facilities that are provisioned to an end-user are not affected by the service speed. This was consistent with the methodology used by Cogeco, RCCI, and Videotron for new and existing coaxial facilities on a speed-band basis.
190. These determinations resulted in the Commission setting one rate for each cable carrier's wholesale HSA access services, regardless of the service speed.

***Positions of parties***

191. The cable carriers submitted that the determination in Telecom Order 2019-288 that set their access rates for aggregated wholesale HSA service to one rate per company failed to capture the costs associated with provisioning faster speeds, including the network investments required to make these speeds available. In addition, the cable carriers submitted that the usage-dependent costs addressed by the rate-setting methodology are separate from, and do not adequately capture, speed-dependent costs.
192. The cable carriers submitted that the costs incurred to build a network that stands ready to deliver high service speeds are substantially higher than those incurred to build a network that only needs to deliver low speeds. They also submitted that building to higher-speed access capabilities requires constant technology upgrades, as well as expanded facilities to subscribing households.

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<sup>17</sup> The flat-rate model provides competitors with unlimited usage and combines the monthly access rate and the monthly capacity charge into one monthly charge. In addition, ancillary charges are set separately for various service charges and interface rates.

193. The cable carriers further submitted that there is an important distinction between speed and usage. An increase in speed enables consumers to complete broadband communications more quickly, but it does not necessarily mean that consumers will change their usage demands. This lack of correlation means competitors can convert to higher speeds generally without a commensurate increase in usage, which would be purchased through additional monthly capacity.
194. Bell Canada supported the cable carriers, submitting that, while higher-speed services do incur greater capacity costs than lower-speed ones because users on faster-speed plans generate, on average, more traffic per second, they do not generate additional traffic proportionally to the speed difference. Instead, the increase in traffic is small.
195. Bell Canada further submitted that the cable carriers' monthly rates for aggregated wholesale HSA service, as determined in Telecom Order 2019-288, will be vastly more attractive than the monthly rates offered by Bell Canada. Given this outcome, Bell Canada argued that competitors will be incentivized to buy the service from the cable carriers at lower prices.
196. Bell Canada submitted that, should it choose to either keep aggregated wholesale HSA service customers by reducing its rates or by maintaining the rates to minimize losses per end-user and allow the number of aggregated wholesale HSA service customers to erode, the consequences to Bell Canada's aggregated wholesale HSA service would be significant.
197. The cable carriers argued that the inability to set speed-based prices will remove the incentives for them to introduce higher-speed services, contrary to the policy objectives. In addition to their methodological concerns, the cable carriers submitted that setting one rate per cable carrier for their respective aggregated wholesale HSA services is a fundamental departure from the long-standing pricing structure used in the retail service market.
198. The cable carriers submitted that Internet speed is a key distinguishing factor in the retail price consumers are willing to pay for Internet service. They argued that consumers want higher speeds and are prepared to pay higher rates for those speeds, and that the speed-banding of wholesale HSA service rates is consistent with this reality.
199. CNOC submitted that the cable carriers' concern refers to the Commission's determination that segmentation fibre is deployed to address usage requirements, and not to respond to access-speed requirements. CNOC submitted that the Commission concluded that the costs associated with segmentation fibre facilities are usage-sensitive and should therefore be included in the usage portion of the cost models.

200. CNOC and TekSavvy submitted that the cable carriers did not present any evidence to overturn these findings. CNOC further submitted that the cable carriers provided no information or evidence to claim that the methodology used to set the rates in Telecom Order 2019-288 did not adequately capture speed-dependent costs in the usage-based rates (monthly capacity charge).
201. CNOC further argued that Bell Canada's claim that competitors will be incentivized to sell aggregated wholesale HSA service from the cable carriers at lower prices ignores the capacity cost incurred by competitors, which, for the cable carriers, is more than twice that of Bell Canada's monthly capacity charge per 100 Mbps.
202. CNOC submitted that Bell Canada's claim that end-users will be incentivized to migrate to competitors' services due to lower prices is unfounded. In support of this view, CNOC submitted that a report by the Competition Bureau (the Competition Bureau Study) indicated that price is a significant factor in consumers' choices, but that other factors, in aggregate, are more important.<sup>18</sup>
203. TekSavvy submitted that the cable carriers' view that an increase in speed does not necessarily mean that consumers change their capacity demands is incorrect. Specifically, as more online applications generate increasing amounts of traffic, and as subscribers continually purchase higher and higher speeds, subscribers require more and more capacity across the board.
204. The cable carriers replied that neither CNOC nor TekSavvy commented on the fundamental concern that there is not a direct or one-to-one correlation between speed and usage. The cable carriers submitted that usage is about traffic, while speed is about how fast that traffic is sent and received. A customer who upgrades to a higher-speed service may simply enjoy faster speeds without a change in usage.
205. The cable carriers further submitted that the methodology used to set rates in Telecom Order 2019-288 arbitrarily and incorrectly equates the unrelated concepts of speed and usage, which have very different underlying costs.
206. Bell Canada replied that the implementation of Telecom Order 2019-288 will immediately and dramatically distort the retail Internet service market and result in likely loss of its aggregated wholesale HSA service customers.
207. Bell Canada added that a number of factors influence a customer's choice of retail Internet service provider. However, if competitors are able to significantly undercut wholesale HSA service providers' retail prices, then customers will almost inevitably migrate to lower-priced services.

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<sup>18</sup> See [Delivering Choice: A Study of Competition in Canada's Broadband Industry](#), 7 August 2019.

### ***Commission's analysis and determinations***

208. In Telecom Order 2019-288, the Commission set one monthly access rate, regardless of service speed, for each cable carrier's wholesale HSA service. However, in making its determinations, the Commission relied on the assumptions provided by each cable carrier that the only access-specific cost to offering increasing service speeds was related to segmentation fibre facilities, with the exception of Eastlink and Shaw, which proposed that coaxial facilities are speed-dependent costs. The Commission determined that segmentation fibre is provisioned to alleviate congestion caused by changes in usage levels across all speed bands, and not to respond to the speed requirements of new services.
209. Consequently, in Telecom Order 2019-288, the Commission did not assign any speed-dependent access costs dedicated to each service speed to reflect constant technology upgrades. As a result, all development costs associated with the incremental costs of offering higher-service speeds was assigned and captured in either the usage portion or the access portion of the cost model and shared across all speed bands.
210. In the Commission's view, the cable carriers' dispute relates to the incremental costs associated with offering higher service speeds that were not properly captured in the final monthly access rate for each speed band determined in Telecom Order 2019-288. The cable carriers argued that the constant technology upgrades required to support higher-speed services and to expand facilities are not properly reflected in the access cost of those service speeds.
211. The cable carriers did not provide evidence as to what speed-dependent costs they would incur other than the originally claimed segmentation costs. However, while further information is required to identify the specific investment needed to offer higher-speed services, the Commission considers that it would be reasonable that any additional investment to offer higher-speed services would result in incremental costs between speed bands.
212. The network measurements of traffic used in developing the usage-sensitive rates, at the time the studies were prepared, validated that end-users on lower-speed services, on average, have less usage than end-users in higher-speed bands. During the current proceeding, no party submitted new network measurements of traffic to dispute this finding.
213. In Telecom Order 2019-288, the Commission considered that the higher usage generated by end-users in higher-speed bands would account for a greater number of 100 Mbps usage increments, thereby addressing the concern that higher-speed services have overall higher costs.
214. The Commission is of the view, however, that should network measurements change significantly from those that were submitted or otherwise prove incorrect, the concern that the rates for higher-speed services would not reflect a higher cost would likely materialize and new cost studies would be required. The Commission also

considers that a single rate for all service speeds, as determined in Telecom Order 2019-288, could dramatically shift the expected usage patterns of competitors' end-users, since there is no price incentive for lower-speed end-users, who typically have less usage, to stay on lower speeds.

215. Moreover, setting one access rate for each cable carrier's speed band is a significant departure from the approach the Commission used to set the cable carriers' monthly wholesale HSA service rates in past decisions. In retrospect, the Commission considers that the significant differences in monthly rates between wholesale HSA service providers (also referred to as asymmetric monthly rates), as set in Telecom Order 2019-288, will impact competition between wholesale HSA service providers and will remove the incentives for the cable carriers to introduce higher-speed services.

216. The Commission is also concerned that competitors would be incentivized to subscribe to higher-speed wholesale HSA services offered by the cable carriers, given that (i) its determinations in Telecom Order 2019-288 resulted in a single access rate for each cable carrier, including service speeds ranging from 5 Mbps to 1 gigabit per second (Gbps); and (ii) a single monthly capacity charge is applied to all service speeds where individual service-speed usage is assessed in the number of monthly capacity charges required to support all customers of a given wholesale HSA service provider.<sup>19</sup>

217. Given the disruptive nature of this specific determination and that the broader policy directions are not advanced, the Commission is concerned that setting one access rate for each cable carrier is not appropriate.

218. The Commission is of the view that the above concern raises substantial doubt as to the correctness of its determinations in Telecom Order 2019-288, because it would be unreasonable to assign zero costs for the development of higher-speed services to the speed-dependent portion of the speed bands. Further, it is unlikely that the causal costs of each access speed band are identical.

## **Explicit costs**

### ***Background***

219. The cable carriers provision their aggregated wholesale HSA service networks as follows: Subscribers connect to a coaxial cable, which in turn is connected to an optical node. The optical node is connected to the cable head-end via fibre facilities, generally called segmentation fibre. In the core network, the head-ends themselves are interconnected using inter-office fibre, also called transport fibre.

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<sup>19</sup> RCCI offers eight banded access services ranging from 15 Mbps to 1 Gbps. In Telecom Order 2019-288, the monthly rate for all these services was set to \$13.44 per end-user.

220. In the proceeding that led to Telecom Order 2019-288, the cable carriers proposed to use the replacement cost new of the segmentation fibre facilities in their cost models to estimate the cost of providing access services with respect to their aggregated wholesale HSA service.
221. In Telecom Order 2019-288, the Commission determined that the cable carriers' proposal to use the replacement cost new approach to estimate the costs of segmentation fibre facilities was inappropriate given that (i) these facilities are shared among different services and, pursuant to the Manual, the replacement cost new approach is used only for discrete facilities; (ii) the Manual also provides that a cost factor approach is an appropriate method to estimate costs for shared facilities that have unlimited capacity or when capacity is difficult to estimate; and (iii) since segmentation fibre facilities have unlimited capacity, no further augmentation of the deployed fibre facilities is required.
222. The Commission also determined in that order that the use of a technology cost factor was more appropriate than the proposals provided by the cable carriers to estimate the costs of segmentation fibre facilities, as well as the proposal from RCCI and Videotron to calculate the costs of transport fibre facilities.

***Positions of parties***

223. The cable carriers disagreed with the determinations in Telecom Order 2019-288 relating to segmentation fibre and transport fibre facilities, arguing that there is a material disconnect between the theoretical network infrastructure captured by the Commission's methodology and the actual networks deployed by the cable carriers to provide aggregated wholesale HSA service. The cable carriers submitted that the methodology used in Telecom Order 2019-288 measures the costs of an artificial network construct comprising only a fraction of the equipment required in an actual cable network, such that it contravenes a foundational principle of just and reasonable rates and raises substantial doubt as to the correctness of the methodology used and the rates set in that order.
224. The cable carriers highlighted that the technology cost factor approach employed by the Commission bears no relationship to the actual costs the cable carriers incur for their broadband facilities and, by necessary implication, to their costs of providing aggregated wholesale HSA service.
225. The cable carriers also submitted that the cost study should include the explicit fibre investment cost data provided by each cable carrier, since the technology cost factor approach would result in estimated costs that are well below those incurred by the carriers. Specifically, they argued that, in the case of RCCI, the methodology (using the technology cost factor and WFF) would result in fibre segmentation costs associated with only 250 of 11,561 nodes present in its network in 2016. This represents less than 10% of RCCI's segmentation costs. In the case of Videotron, the technology cost factor approach would result in fibre segmentation costs associated with only 1,341 kilometres, instead of its actual 17,800 kilometres of segmentation fibre installed (resulting in only 8% of the segmentation fibre).

226. CNOC submitted that, while the cable carriers relied on RCCI's technology cost factor and WFF to support their view that the estimated costs are well below those incurred, Telecom Order 2019-288 includes detailed and evidence-backed reasons explaining why RCCI's proposals related to the WFF and costs related to fibre segmentation are inappropriate.
227. CNOC also submitted that Videotron likely proposed to use the replacement cost new approach to estimate its fibre segmentation costs. CNOC argued that in Telecom Order 2019-288, the Commission determined that fibre segmentation costs should be estimated using a technology cost factor, because fibre segmentation facilities are shared among different services and the capacity to provision an optical node cannot be said to be limited.
228. CNOC also argued that the cable carriers did not provide new evidence or arguments to support their positions that the Commission erred in its determinations related to the use of technology cost factors for estimating fibre segmentation costs for the cable carriers and the use of RCCI's WFF.
229. The cable carriers replied that CNOC missed the point that the methodology results in a cost base that bears no relationship to the actual costs incurred to build cable carrier networks. They submitted that CNOC provided no explanation of how the recovery of a fraction of actual costs complies with the statutory directive to ensure that rates are just and reasonable or with the policy objectives.

***Commission's analysis and determinations***

230. In Telecom Order 2019-288, the Commission rejected the cable carriers' proposal to use the replacement cost new approach to estimate their segmentation fibre facility costs, based on its assessment that segmentation fibre facilities are shared among different services, and that it is not appropriate to use the replacement cost new approach to estimate costs of shared facilities.
231. The Commission considers its assessment incorrect since, based on the Phase II costing methodology, the cost of a service that uses a shared facility is estimated using the capacity cost approach, which incorporates the replacement cost of the new facilities.<sup>20</sup>
232. The capacity cost approach uses the finite capacity of the replacement facility to estimate the unit costs of the new facilities. The subsequent use of the facility by the demand/service under analysis is then used to estimate the costs causal to a service.
233. The Manual describes that technology cost factors are used when (i) the effort required to explicitly estimate the causal costs of unlimited capacity facilities is not commensurate with the materiality of these costs, and (ii) when shared facilities have

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<sup>20</sup> Section 1.2.7.1 – Valuation of Shared Plant of the Manual identifies that new or existing shared facilities' costs are estimated using the cost of advancement, for which the capacity costing methodology is generally used to estimate.

unlimited capacity. In these situations, capacity costing may not be an appropriate approach to calculate the capital costs, so the Commission determined that a capital technology cost factor approach may be used to estimate these costs.<sup>21</sup>

234. In the proceeding that led to Telecom Order 2019-288, the cable carriers proposed to use the explicit fibre cost (i.e. the actual expenditures incurred) provided by each cable carrier in determining the cost of segmentation fibre facilities.
235. In support of this view, the cable carriers submitted that, for new optical node builds, new segmentation fibre facilities are required. They further submitted that, for existing optical nodes that require relief, segmentation fibre is required when no fibre strands are available in existing segmentation fibre facilities.
236. The cable carriers added that the explicit estimates of segmentation fibre facility costs were submitted in the proceeding that led to Telecom Order 2019-288. Therefore, the use of an estimated cost factor to estimate these costs is moot.
237. In Telecom Order 2019-288, however, the Commission indicated that fibre cables have unlimited capacity because the capacity of fibre to serve a given node is, in practice, not subject to exhaustion. However, the Commission did not address the concern that each optical node requires a fibre strand and that, once all available strands are exhausted, new segmentation fibre facilities are deployed to meet future optical node requirements.
238. The Commission is of the view that this missing justification is critical to demonstrate whether the capacity costing approach should be used as opposed to the technology cost factor approach.
239. In addition, pursuant to the Manual, the effort required to estimate the causal costs of segmentation fibre facilities should be taken into consideration. Given that the Commission, in Telecom Order 2019-288, continued to assume that 75% of the proposed node segmentation capital costs are causal to the wholesale HSA and retail Internet services, the resulting estimate following the application of the 75% factor would be the explicit costs causal to those services.
240. In light of the above, the Commission is of the view that there is doubt as to the correctness of the determination to use the capital technology cost factor approach to estimate segmentation fibre facility costs.

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<sup>21</sup> Capital technology cost factors for fibre are calculated by determining the ratio of total capital expenditures for fibre cable to the total capital expenditures for equipment making use of the technology, using a number (three to five years) of historical data. Under the technology cost factor approach, this factor is then applied to the equipment making use of the technology (e.g. the optical node costs) to estimate fibre costs.

## Costing methodology for new and existing coaxial facilities

### Background

241. Coaxial facilities are used to provision wholesale HSA services over FTTN networks (generally referred to as HFC networks for cable carriers). These networks consist of coaxial facilities between an optical node and a group of homes which carry various end-user service traffic (e.g. Internet, television, and telephone).
242. Coaxial facilities support multiple data channels for carrying different types of service traffic. Retail Internet and wholesale HSA services use a number of these data channels, depending on the speeds of services offered by the cable carrier.
243. In Order 2000-789, the Commission considered that the cable carriers' proposed proxy cost of \$0.152 per channel,<sup>22</sup> as approved in Public Notice 1997-35 (based on a calculation from Public Notice 1996-132), was appropriate for all cable carriers, irrespective of network size and geographic location.
244. In the proceeding that led to Telecom Order 2019-288, the cable carriers expressed their concerns that the proxy approach used in Order 2000-789 was no longer appropriate, since the information and data used to calculate the proxy is outdated. As a result, the cable carriers proposed to use the capacity costing approach.
245. In Telecom Order 2019-288, the Commission considered that the cable carriers' proposal to use the capacity costing approach to estimate the cost of new and existing facilities was not appropriate. The Commission explained that, as services use existing coaxial facilities, relief is provided by adding other equipment; however, no additional coaxial facilities are required as a result of augmenting services and, therefore, incremental services do not advance the relief of existing coaxial facilities. For this reason, there is no cost of advancement.<sup>23</sup>
246. To address the cable carriers' concerns related to the proxy approach, in Telecom Order 2019-288, the Commission used updated company-specific information related to depreciation and operating expenses to estimate costs for existing coaxial facilities for each cable carrier. The Commission further removed the 23% rate of return associated with the cost of a channel because the rate of return is already incorporated in each cost model.
247. In addition, the Commission revised the methodology used to estimate coaxial facility costs in the cable carriers' cost studies to include two approaches. For existing coaxial facilities, the costs included in the cost studies would reflect the

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<sup>22</sup> The estimated cost of a channel included any incremental costs related to the provision of a channel, all common facility costs, depreciation expense, and a further 23% of year-end fixed assets to allow for a reasonable return on capital, interest, and taxes.

<sup>23</sup> Cost of advancement describes the impact of an individual service's use of a facility that is also used by other services. As the individual service uses the facility, it uses some of the capacity that otherwise would be available for the other services. This process results in additional facilities being purchased sooner.

same cost categories used in calculating the proxy in Public Notice 1996-132, using updated company information, with the exclusion of the 23% rate of return. Regarding new coaxial facilities, the costs included in the cost studies would reflect the average cost per new home passed during the study period, as proposed by the cable carriers.

***Commission's analysis and determinations***

248. As described above, in Telecom Order 2019-288, the Commission used two different approaches to estimate the cost of coaxial facilities.

249. However, subsection 1.2.1(1-9) of the Manual states that one approach should be used in estimating the capital costs for an existing service and that the approach is based on new facilities being added to meet growth in demand, as well as the facilities being required to meet existing demand.

250. For new facilities, the approach in the Manual estimates the unit cost of a facility being deployed as a result of growth in demand. For example, the resulting annual cash flow is estimated by taking the average cost per new home passed multiplied by the growth in new homes that will be added each year.

251. For existing facilities, the approach in the Manual uses the same unit cost as that of new facilities. For example, the resulting cash flow at the beginning of the study is estimated by taking the average cost per new home passed multiplied by the existing demand in homes passed.

252. Because coaxial facilities are used to provide aggregated wholesale HSA services as well as other services that require new or existing coaxial facilities, the Commission considers that, based on the Manual, it is not appropriate to use two different approaches to estimate the cost of new and existing coaxial facilities.

253. Regarding the determination in Telecom Order 2019-288 that there is no cost of advancement for existing coaxial facilities because relief is provided by segmenting the facilities and not by adding additional coaxial facilities,<sup>24</sup> the other equipment added, referenced in Telecom Order 2019-288, is required to provide relief from end-user usage patterns and is therefore not applicable in assessing the cost of advancement for existing coaxial facilities.

254. The Commission notes that the cost of coaxial facilities is recovered in the cable carriers' aggregated wholesale HSA access rates, which are driven by the number of subscribers and homes. The Commission considers that the cost of advancement must reflect the cost of adding subscribers and homes, and not reflect their usage. Given that the FTTN access network is growing and includes coaxial facilities to advance the FTTN access network, the Commission considers that there is a cost of advancement associated with coaxial facilities.

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<sup>24</sup> Segmentation requires the addition of an optical node along with fibre facilities that connect back to the head-end. However, no additional coaxial facilities are required.

255. In light of the above, the Commission finds that there is substantial doubt as to the correctness of its determination in Telecom Order 2019-288 to use two different approaches in estimating the cable carriers' coaxial facility costs.

#### **Attribution factor for CCAP facilities**

##### ***Background***

256. In Order 2000-789, the Commission reviewed the approach used to assess network facility costs included in the rates for the cable carriers' wholesale HSA services. The Commission considered that certain costs incurred by the cable carriers were also incurred to permit them to offer other services, including retail Internet service and pay-per-view television.

257. As a result of that review, the Commission was not persuaded that all of the capital costs related to certain facilities, such as those required for bi-directionality,<sup>25</sup> node segmentation,<sup>26</sup> and IP layer,<sup>27</sup> were related only to the provision of the wholesale HSA services.

258. Given this, the Commission, for the purpose of calculating a monthly rate per end-user for wholesale HSA service<sup>28</sup> for each cable carrier in Order 2000-789, approved an attribution percentage for certain equipment such as segmentation fibre, optical nodes, and Cable Modem Termination System facilities.

259. In Telecom Decision 2006-77, the Commission approved attribution rates of 75% for bi-directionality and node segmentation, and 90% for IP layer.

260. In Telecom Order 2019-288, the Commission stated that, in the absence of any evidence, and given that future services are expected to benefit from segmentation facility investments over the study period, an attribution factor of 75% continued to be appropriate. Therefore, it applied the 75% attribution factor to segmentation fibre, optical nodes, and CCAP facilities.

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<sup>25</sup> Historically, the cable carriers' access facilities were one-way, where broadcasting television signals were sent from the head-end to an end-user's residence. To offer retail Internet services, the cable carriers invested in various equipment that was required to enable end-users to transmit data two ways, or bi-directionally, from the head-end to the end-user.

<sup>26</sup> Node segmentation refers to the process of reducing the number of end-users served by a fibre feed from the head-end. As usage increases, the amount of bandwidth available to each end-user will decrease. To increase the amount of bandwidth available per end-user, equipment is added (e.g. optical node or segmentation fibre) to relieve the existing equipment.

<sup>27</sup> IP layer enables transmission of data over fibre facilities and includes equipment such as the CCAP or Cable Modem Termination System (CMTS) to provide communications between the end-user's modem and the router that passes traffic to the competitor.

<sup>28</sup> In Order 2000-789, wholesale HSA service was referred to as third-party Internet access (TPIA).

### ***Commission's analysis and determinations***

261. The Commission has identified a concern related to the determination to set the CCAP attribution factor at 75%.
262. The attribution factors prior to the issuance of Telecom Order 2019-288 for segmentation fibre and optical node facilities were set at 75%: however, the attribution factor for IP layer facilities, such as CCAP facilities, was set at 90%, as determined in Telecom Decision 2006-77.<sup>29</sup>
263. The Commission considers that it erred in its determination by stating that “an attribution factor of 75% continues to be appropriate” when considering attribution factors for segmentation fibre, optical nodes, and CCAP facilities, because the CCAP facilities’ attribution factor was previously set at 90% in Telecom Decision 2006-77.
264. The Commission therefore finds that there is substantial doubt as to the correctness of its determination in Telecom Order 2019-288 to set the CCAP attribution factor at 75%.

### **Videotron – Application of WFF to CCAP unit costs**

#### ***Background***

265. In Telecom Order 2019-288, the Commission identified that Videotron’s CCAP unit costs<sup>30</sup> included a WFF that was applied twice. The Commission therefore adjusted the CCAP unit costs to reflect applying a WFF once.

### ***Commission's analysis and determinations***

266. The Commission has reviewed Videotron’s cost model and notes that it inadvertently did not make the adjustment to apply a WFF only once, resulting in an overestimation of the usage-sensitive costs.
267. The Commission therefore finds that there is substantial doubt as to the correctness of Telecom Order 2019-288 as it pertains to the Commission’s adjustment of Videotron’s CCAP unit costs.

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<sup>29</sup> In Telecom Decision 2006-77, the Commission set the attribution factor for IP layer facilities, which included CMTS facilities, at 90%. Given that CCAP facilities are the evolution of CMTS facilities, the Commission determined that it would be appropriate to categorize CCAP facilities as IP layer facilities, resulting in an attribution rate of 90%.

<sup>30</sup> Unit costs are estimated by taking the total cost to deploy a facility divided by its maximum capacity and adjusted by a WFF to reflect that certain capacity is unused at the time that additional equipment is installed to meet rising demand.

## **Shaw – Discount factor**

### ***Background***

268. In Telecom Order 2019-288, the Commission identified errors in Shaw's approach to take the costs estimated in the company's cost study and express them as monthly costs (referred to as Monthly Equivalent Cost [MEC]). Specifically, Shaw's approach to calculate the end of study terminal value and related capital cost allowance tax shield included errors.

### ***Commission's analysis and determinations***

269. The Commission has reviewed Shaw's cost model and notes that in Telecom Order 2019-288, it applied an incorrect after-tax weighted average cost of capital (AT-WACC),<sup>31</sup> thereby underestimating the costs approved in that order.

270. The Commission therefore finds that there is substantial doubt as to its setting of Shaw's monthly capacity rate and monthly access rates in Telecom Order 2019-288, given that they were calculated using the incorrect AT-WACC.

### **Conclusion**

271. The Commission, under section 62 of the Act, may, on application, review and rescind or vary any decision made. The Commission, in the revised guidelines for review and vary applications in Telecom Information Bulletin 2011-214, stated that, in order for the Commission to exercise its discretion pursuant to section 62 of the Act, applicants must demonstrate that there is substantial doubt as to the correctness of the original decision.

272. The Commission has reviewed the concerns and errors identified and is of the view that a number of these concerns and errors are valid, which demonstrates substantial doubt as to the correctness of the final rates set in Telecom Order 2019-288.

273. In light of the above, the Commission determines that there is substantial doubt as to the correctness of the aggregated wholesale HSA service rates set in Telecom Order 2019-288, which include certain monthly capacity rates per 100 Mbps, monthly access rates per end-user, and rates related to service charges.

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<sup>31</sup> The AT-WACC is a factor used in the process of estimating a monthly costs (discounting cost to reflect estimated costs throughout the study period at one point in time). Using an incorrect AT-WACC can result in underestimation or overestimation of costs, which results in the monthly rate being affected.

**If there is substantial doubt as to the correctness of the aggregated wholesale HSA service rates set in Telecom Order 2019-288, how should that order be varied?**

**Background**

274. Having established that there is substantial doubt as to the correctness of the final rates established in Telecom Order 2019-288, the Commission must determine what rates would be just and reasonable. Subsection 27(1) of the Act requires that the rates charged by Canadian carriers be just and reasonable at all times, and subsection 27(1) requires that the rates charged must be set out in a tariff approved by the Commission. Pursuant to subsection 27(5) of the Act, the Commission is empowered to adopt any method it considers appropriate to determine whether a rate is just and reasonable. Pursuant to paragraph 37(1)(a), the Commission can require carriers to adopt any costing or accounting method for the purposes of the administration of the Act.

275. Further, pursuant to subsection 47(a) of the Act, the Commission is required to exercise its powers, including the power to set rates, with a view to implementing the policy objectives. Pursuant to subsection 47(a), it must ensure that Canadian carriers provide telecommunications services and charge rates in accordance with section 27 (i.e. rates that are just and reasonable).

276. The SCC has confirmed that the Act affords the Commission significant flexibility in the methods it uses in determining just and reasonable rates.<sup>32</sup>

**Positions of parties**

277. TCI proposed that the Commission vary its decision by simply fixing any errors identified in its determinations related to the Phase II costing methodology and establish new final rates based on the revised cost studies that would be the result.

278. Bell Canada proposed making the interim rates for aggregated wholesale HSA that were in effect prior to the issuance of Telecom Order 2019-288 (the interim rates) final. Bell Canada did not request that the Commission correct the errors identified in its review and vary application that raised substantial doubt as to the correctness of the order.

279. In support of its proposal, Bell Canada submitted the following:

- the errors identified in its review and vary application demonstrate that the costing methodology, as it applied to aggregated wholesale HSA service in the proceeding that led to Telecom Order 2019-288, is broken and fails to produce proper economic costs;

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<sup>32</sup> *Bell Canada v. Bell Aliant Regional Communications*, [2009] 2 S.C.R. 764, at paras. 41-48.

- implementation of the rates approved in Telecom Order 2019-288 will deter facilities-based service providers from investing in networks; and
- reinstating the interim rates would allow for continued competitive growth.

280. Bell Canada also submitted that the interim rates have enabled competitors to flourish. As noted in the Competition Bureau Study, wholesale-based competitors account for between 15% and 20% of the retail Internet service market in regions like southern Ontario and Quebec. Furthermore, competitors provide Internet service to more than 1 million Canadian households. Bell Canada further submitted that, on average, competitors accounted for 41% of all net subscriber additions between 2013 and 2017, and that these new customer acquisitions may be a better indicator of competitive vigour in the Internet service market than market shares based on existing customers.

281. Bell Canada also submitted that the interim rates allowed wholesale HSA service providers to continue to invest in their networks and that reinstating those rates would reverse the market distortion in the wholesale HSA service market caused by the final rates, where competitors were granted access to cable carriers' aggregated wholesale HSA service rates at a lower cost than Bell Canada's access rates for wholesale HSA service, irrespective of the service speed.<sup>33</sup>

282. Bell Canada added that the reduced aggregated wholesale HSA service rates approved in Telecom Order 2019-288 would encourage end-users to remain on legacy facilities and discourage migration to services offered over next-generation networks (such as FTTP), impacting investment in those networks.

283. The cable carriers also proposed reverting to the interim rates to address their concern that one wholesale rate for all access speeds per company does not properly capture the costs of deploying higher access speeds. They did not request that the Commission correct specific errors identified in their review and vary application that raised substantial doubt as to the correctness of Telecom Order 2019-288. They argued that the costing methodology used to determine the rates in Telecom Order 2019-288 failed to reflect real-world cable carrier networks.

284. The cable carriers submitted the following in support of their proposal:

- given the Commission's own recognition that a review of its approach to wholesale rate setting is both necessary and overdue, there is substantial doubt as to the correctness of approving massive reductions in aggregated wholesale HSA service rates on the eve of a review;

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<sup>33</sup> Bell Canada's aggregated wholesale HSA service was available at speeds up to 100 Mbps, whereas the cable carriers' respective wholesale HSA services were available at speeds up to 1 Gbps at the time Telecom Order 2019-288 was published.

- given the technological and competitive evolution of Canadian telecommunications markets, the costing methodology cannot establish just and reasonable wholesale HSA service rates for cable carriers;
- the costing methodology violates the requirement for competitively neutral treatment of the ILECs and the cable carriers by imposing ILEC network and cost structures on the cable carriers, which precludes the recovery of costs and denies the cable carriers a fair return on their investments;
- implementing the rates approved in Telecom Order 2019-288 will negatively impact the cable carriers' network investment capabilities and incentives;
- in Telecom Order 2019-288, the Commission ignored the asymmetry and anti-competitive impact created by requiring the cable carriers to provide competitors with wholesale access to their highest-speed services at deeply discounted rates while not requiring the same of the ILECs;
- in Telecom Order 2019-288, the Commission set aggregated wholesale HSA service rates that result in the worst form of market distortion and regulatory asymmetry; and
- the determinations in Telecom Order 2019-288 are not competitively neutral and are completely unsustainable.

285. CNOC submitted that, although TCI requested specific relief regarding the costing determinations, the requested relief is grounded on fatally flawed costing arguments that are not in accordance with the Phase II costing methodology and should be rejected.

286. CNOC further submitted the following:

- Bell Canada and the cable carriers are requesting to adopt, on a final basis, a set of interim rates that the Commission approved and stated in Telecom Order 2016-396 were “based on an examination that is necessarily less than fully comprehensive”;
- Bell Canada and the cable carriers are, in effect, asking the Commission to ignore the requirement under subsection 27(1) of the Act that Canadian carriers charge just and reasonable rates;
- given subsection 27(1) of the Act, Bell Canada's characterization of FTTN technology as legacy is irrelevant to the nature of the Commission's adjustments to Bell Canada's access rates with respect to its aggregated wholesale HSA service rate;
- Bell Canada and the cable carriers have not requested specific costing relief, despite their claims that the Commission made costing errors in arriving at the rates approved in Telecom Order 2019-288, which amounts to an obvious delay tactic without any rational foundation; and

- competitors incur more capacity-based costs for customers who adopt higher speeds, because these customers tend to use more demanding applications, thereby driving up their usage.

287. TekSavvy submitted that competitors are already under enormous pressure given the interim rates, following years of pressure from even more inflated rates. Any variance to the rates approved in Telecom Order 2019-288 will directly and immediately result in even lower levels of competition as wholesale-based competitors are forced to raise retail prices to uncompetitive levels or exit the market altogether.

288. TekSavvy also submitted that the interim rates sought by the applicants are the same rates that the Commission determined to be inflated, and with respect to which the Commission determined that the applicants ignored the mandated Phase II costing methodology.

### **Commission's analysis and determinations**

289. The Commission's general practice is to resolve the specific errors identified in a review and vary process. In doing so, the Commission exercises its discretion to vary its original decision and remedy the substantial doubt as to the correctness of the original decision.

290. The Commission considers that the specific errors identified, once resolved, would lead to access rates for the ILECs' aggregated wholesale HSA service set in Telecom Order 2019-288 being revised significantly. The Commission estimates that the majority of these rates would approach and be comparable to those currently in place on an interim basis, with some ILEC access rates exceeding the interim rates.

291. The Commission has determined that a number of cable carrier-related issues result in substantial doubt to the correctness of the rates approved in Telecom Order 2019-288. Correcting the errors would lead to increasing those rates.

292. The Commission acknowledges that a fulsome revision to the cost studies that support the aggregated wholesale HSA service rates would provide just and reasonable rates. However, the Commission considers that there are concerns with this approach.

293. In order to complete a fulsome revision to the cost studies, further information is required. This would result in prolonging the period of time without final aggregated wholesale HSA service rates in place, a situation that has already existed in the market for more than four years, by likely another year.

294. Further, seeking information at this time would result in the rates approaching or exceeding the end of the study periods used by the wholesale HSA service providers in the proceeding that led to Telecom Order 2019-288.

295. Also, a review of the approach to rate setting for wholesale telecommunications services commenced on 24 April 2020 in Telecom Notice of Consultation 2020-131 and is ongoing. This review may address specific costing concerns identified in the review and vary applications. Accordingly, another review of the cost studies could result in a relatively small benefit in setting final rates, because they may undergo further review shortly after they are issued.
296. In addition, a fulsome revision to the cost studies would require significant resources from the industry at a time when several other related proceedings are ongoing (e.g. network configuration for disaggregated wholesale HSA services and the wholesale rate-setting review).
297. Given all the above, the Commission is concerned that committing a significant amount of resources to a further review would contribute to impeding the objectives set out in Telecom Regulatory Policy 2015-326 regarding the ultimate goal of having a smooth transition to the adoption of disaggregated wholesale HSA service with a corresponding reduction in aggregated HSA service availability.
298. The Commission is also concerned that setting aggregated wholesale HSA service rates based on the current record has the potential to create negative unintended consequences that could harm competition. In particular, it is likely that addressing and correcting the concerns and errors identified in the review and vary applications will result in final rates that will serve only to compound asymmetrical rate-offering issues between the cable carriers and the ILECs, which likely will materially affect competition between wholesale HSA service providers. The Commission also considers that aggregated wholesale HSA service rates that are set too low would discourage the migration to disaggregated wholesale HSA service.
299. The Commission notes that there has been significant regulatory uncertainty in setting aggregated wholesale HSA service rates, which has negatively influenced the business plans of both the wholesale HSA service providers and competitors. The Commission considers that setting final aggregated wholesale HSA service rates would remove this current regulatory uncertainty.
300. In Telecom Regulatory Policy 2015-326, the Commission stated that the existing company-specific incremental costing approach remains the appropriate approach for rate-setting for mandated wholesale services. Notwithstanding this conclusion, the Commission may adopt other costing approaches, where appropriate and on a case-by-case basis, to improve regulatory efficiency or to further certain policy objectives. The Commission notes that proxies or alternative methods are often used to establish just and reasonable rates, such as by allowing companies to use the cost studies and resulting rates approved for another company for the same service.
301. Given these concerns and given that aggregated wholesale HSA services are no longer mandated, the Commission considers that making the existing interim rates final represents a viable approach that results in just and reasonable rates, while lowering regulatory burden.

302. As discussed above, even if the Commission did conduct the full costing analysis necessary to address the errors identified in its determinations, this would lead to significant increases in these rates and, in many cases, would likely set rates that would approach and be comparable to the existing interim rates. Given this result, the Commission considers that the benefit of completing a fulsome revision to the cost studies would be marginal.
303. Regarding concerns raised by the competitors that any variance in aggregated wholesale HSA service rates will harm competition and force retail prices to uncompetitive levels, information in figure 9.1 of the Commission's 2019 *Communications Monitoring Report* and in the Competition Bureau Study demonstrated existing growth in competition that has continued with the interim rates in place.
304. The Commission notes that, while certain interim rates were based on an examination that was necessarily less than fully comprehensive, they are based on the Phase II costing methodology and reflect significant adjustments from the original rates proposed by the Commission at the beginning of the process based on its preliminary review of the matters. At that time, the Commission cautioned that it had not yet conducted a fulsome review of the interim rates and therefore could not determine at that time if the rates would, in fact, be just and reasonable on a final basis. However, that does not preclude the finding that the interim rates now, after an extensive review process, can be just and reasonable in the unique circumstances of this case. Moreover, the interim rates nevertheless are related to a non-mandated service, have advanced certain policy objectives (e.g. increasing competition and investments to further the development of facilities-based competition), and have been in place for more than four years. The Commission therefore considers that making the interim rates final would further incent and foster investments and facilities-based competition.
305. The Commission therefore **approves on a final basis** the rates in effect for aggregated wholesale HSA services that were approved on an interim basis prior to the issuance of Telecom Order 2019-288, subject to the changes to the supplementary markup and implementation of speed banding that are discussed below.

## **Other considerations**

### **Retroactivity**

#### **Background**

306. Retroactivity is a term used to describe the process where the final rates approved can be made effective as of a prior date, and the differences are owed to the respective parties. This process ensures that final rates are just and reasonable throughout the process to set rates, consistent with subsection 27(1) of the Act.

307. In Telecom Orders 2016-396 and 2016-448, the Commission revised certain interim rates, which were set as interim in Telecom Decision 2016-117, for aggregated wholesale HSA services proposed by wholesale HSA service providers, in order to reflect past Commission determinations. The Commission stated in those orders that it would assess the extent to which, if at all, retroactive rates would apply when it set the rates on a final basis.
308. Further, in Telecom Orders 2016-396 and 2016-448, the Commission approved the transition of aggregated wholesale HSA service offerings from the flat-rate billing model to the CBB model for Shaw and Eastlink, respectively.
309. In Telecom Order 2019-288, the Commission decided that the final rates were to apply retroactively from the date of its interim decision (i.e. from 31 March 2016), with the exception of Shaw. The Commission determined that Shaw's retroactivity period began on 31 January 2017 to take into consideration Shaw's transition of its wholesale HSA service from the flat-rate billing model to the CBB model.

#### **Positions of parties**

310. Bell Canada, the cable carriers, and TCI submitted that the size of the retroactive payments will have a detrimental impact on investment and will pass funds on to competitors with no obligation for them to pass the savings on to their end-users.
311. Bell Canada also submitted that the Gilbert + Tobin Report<sup>34</sup> concluded that, of the international regulators reviewed that could implement retroactivity, none would choose to exercise retroactivity in a similar situation found in Telecom Order 2019-288.
312. The cable carriers submitted that the Commission failed to consider the penal nature of retroactive payments, estimated at \$325 million, which constitutes a serious omission and raises substantial doubt as to the correctness of this aspect of the order.
313. The cable carriers further submitted that competitors have not been harmed because the aggregated wholesale HSA service rates are based on pre-determined costs, recoverable through the retail prices they charge. As a result, competitors have already recouped their costs and retroactive payments are a pure windfall.
314. The cable carriers added that retroactive application of the final rates is inconsistent with the 1989 SCC determination that interim rates are to provide temporary relief against the deleterious effects of the duration of the proceedings and not undermine financial stability (the 1989 SCC ruling).<sup>35</sup>

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<sup>34</sup> *Retroactive rate setting – A review of regulatory precedent*, 11 November 2019. This report provides an international perspective on retroactive redetermination of regulated rates in the context of the Commission's determination in Telecom Order 2019-288 to retroactively apply final rates.

<sup>35</sup> *Bell Canada v. Canada (Canadian Radio-television and Telecommunications Commission)*, [1989] 1 S.C.R. 1722. In that ruling, the SCC determined that the added flexibility provided by the power to make retroactive interim orders is meant to foster financial stability throughout the regulatory process.

315. The cable carriers argued that, without prejudice to the concerns raised, the retroactivity period for Eastlink should be varied to 1 January 2017, based on the same rationale used to adjust Shaw's retroactivity period in Telecom Order 2019-288.
316. TCI submitted that longer periods of retroactivity are problematic and cause regulatory uncertainty. Specifically, TCI submitted that applying the aggregated wholesale HSA service rates retroactively to 2016 is bad policy because it penalizes facilities-based carriers that made sustained broadband investments during the time interim rates were in place. Retroactive rate application also provides no corresponding benefit to consumers from the retroactive payments and promotes regulatory uncertainty. TCI further submitted that retroactivity contradicts the 1989 SCC ruling.
317. Allstream, CNOC, and Distributel submitted that in Telecom Order 2019-288, the Commission ensured that the aggregated wholesale HSA service rates are always just and reasonable by making them effective as of the dates that they were made interim. Allstream listed four past Commission decisions in support of its position, with retroactive payment periods ranging from 13 to 67 months.<sup>36</sup>
318. CNOC and Distributel also submitted that Bell Canada, the cable carriers, and TCI contributed to the long period of time in which the interim rates were in effect. They further submitted that competitors are investing in networks and have passed savings resulting from the determinations in Telecom Order 2019-288 onto their customers through discounts and speed adjustments.
319. CNOC submitted that the 1989 SCC ruling noted that one of the purposes of establishing interim rates is to provide temporary relief against the deleterious effects of the durations of proceedings, but that Bell Canada, the cable carriers, and TCI did not present any grounds that constitute an authoritative precedent against the retroactivity determinations in Telecom Order 2019-288.
320. CNOC submitted that the Gilbert + Tobin Report describes the legal framework for retroactive rate-setting in three jurisdictions, which only shows that different telecommunications regulators operate in different legal contexts.
321. Distributel submitted that retroactive payments are not new charges imposed after the fact, but that they are refunds of the amounts overcharged through rates that were not just and reasonable. Distributel further submitted that the claim by Bell Canada, the cable carriers, and TCI that competitors will not provide corresponding benefits to consumers is irrelevant and unsubstantiated.

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<sup>36</sup> Allstream specifically referred to Telecom Decisions 2006-22, 2006-42, and 2012-628, as well as Telecom Order 2009-775.

322. Distributel and TekSavvy were skeptical that retroactive application of final rates would contribute to the investment concerns identified by Bell Canada, the cable carriers, and TCI. TekSavvy further submitted that any retroactive payment would be the result of applying final determinations to the unjust and unreasonable interim rates.
323. With regard to the wholesale HSA service providers contributing to the length of time of the proceeding, Bell Canada replied that only 15 weeks were granted related to extension requests by any party and that the proceeding would still have taken three years if no extensions were granted. In addition, the cable carriers replied that the Commission set the timelines throughout the proceeding, which they complied with.
324. With regard to the wholesale HSA service providers being aware of final rates applying retroactively, Bell Canada submitted that being aware is irrelevant with respect to whether retroactivity should or should not be applied. Bell Canada submitted that the Gilbert + Tobin Report remarked that the Commission's decision to apply rates retroactively sits uncomfortably with the core principles of *ex ante* regulatory frameworks.
325. The cable carriers replied that the interventions received failed to identify any compelling reason why the final rates approved in Telecom Order 2019-288 should be applied retroactively, with the result that there is substantial doubt as to the correctness of that order.

#### **Commission's analysis and determinations**

326. The Commission considers that, when it made all wholesale HSA service rates interim in Telecom Decision 2016-117 and stated that it would assess the extent to which, if at all, retroactive rates would apply when it set the rates on a final basis, it effectively indicated that the final rates could be applied retroactively.
327. The Commission has a broad discretion to set just and reasonable rates, which includes the ability to make interim rates final on either a retroactive or prospective basis. Retroactive rate application looks to correct for any party underpaying or overpaying for services while the Commission reviews applications supporting proposed rates. Further, there is no requirement for competitors to provide benefits or refunds to their end-users from any retroactive payments received.
328. The Commission considers that retroactive application of the final rates is not intended to be punitive, to harm investments, or to be considered a windfall of revenue, but is intended to correct timing differences that occur from reviewing proposed rates.
329. The Commission further considers that retroactive application of final rates is one method to reduce the impact of the length of a proceeding because it provides a disincentive for timing-related differences that occur in reaching a determination. In addition, the Commission notes that no party provided evidence of retroactive

payments resulting in undermining financial stability, nor did they demonstrate that the retroactivity determination in Telecom Order 2019-288 contradicts any relevant SCC determinations.

330. The Commission therefore determines that the final rates set in this decision be applied retroactively as of 31 March 2016, with the exceptions discussed below.

331. The Commission has, in certain circumstances, exercised its discretion not to apply rates retroactively, taking into consideration specific circumstances such as the minimal magnitude of retroactive payments and the complexity to estimate retroactive payments.

332. One such example was to adjust Shaw's retroactive rate application period, in Telecom Order 2019-288, to commence on 31 January 2017 to reflect the complex task of estimating retroactive payments covering the period where Shaw's wholesale HSA service rates were developed using the flat-rate billing model.

333. The Commission is of the view that Eastlink would face the same complex task in determining what rates would be applicable during the transitioning time period (i.e. between 31 March 2016 and 28 February 2017). The Commission considers that the same approach used to adjust Shaw's retroactive period should be applied to Eastlink for regulatory symmetry.

334. Accordingly, the Commission determines that Shaw's and Eastlink's revised retroactive rate application periods begin on 31 January 2017 and 28 February 2017, respectively.

## **Supplementary markup**

### **Background**

335. When the Commission establishes a tariffed rate for a service, it typically adds an appropriate percentage, referred to as a markup, to the cost of the service. This results in the service's tariffed rate equalling its Phase II costs plus the amount of the markup.

336. The markup has varied over time for wholesale services depending on a number of factors, including whether the service is essential,<sup>37</sup> as well as whether there may be additional risk to network investment if the wholesale service is mandated.

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<sup>37</sup> In Telecom Decision 2008-17, the Commission defined an essential service as a service that met the following conditions: (i) the facility is required as an input by competitors to provide telecommunications services in a relevant downstream market, (ii) the facility is controlled by a firm that possesses upstream market power such that withdrawing mandated access to the facility would likely result in a substantial lessening or prevention of competition in the relevant downstream market, and (iii) it is not practical or feasible for competitors to duplicate the functionality of the facility.

337. In Telecom Decision 2002-34, the Commission noted that the determination of an appropriate level of markup for a given service's cost is a decision related to pricing rather than costing, and that changes to the markup are the result of policy considerations.
338. In Telecom Regulatory Policy 2010-632, the Commission considered that the investment risk associated with the construction of new FTTN facilities for the ILECs is greater than the risk associated with other ILEC facilities. Thus, the Commission determined that it is appropriate for the ILECs to use a higher cost of capital, comparable to the hurdle rate<sup>38</sup> Bell Canada used in its internal FTTN investment studies, to reflect the additional risk. However, the Commission noted that determining a revised cost of capital would involve a review of each ILEC's capital structure (e.g. cost of equity and cost of debt) and, for tariff purposes, the simplest approach for recognizing higher cost of capital would be to apply a 10% supplementary markup to the costs.
339. In Telecom Decision 2013-73, the Commission determined that the rates for business wholesale HSA services are to be the same as the rates for comparable residential wholesale HSA services and, in doing so, reduced the markup on business wholesale HSA services. The Commission further determined that it is not appropriate to retroactively apply changes to the business wholesale HSA service rates since these changes were not the result of costing errors, but were instead policy considerations.
340. In Telecom Order 2019-288, the Commission considered that the ILECs' focus has shifted from expanding their FTTN networks to growing their FTTP coverage footprint as much as possible, given the important benefits associated with higher speeds and long-term service reliability.
341. Further, in Telecom Order 2019-288, the Commission considered that the rationale to approve a 10% supplementary markup on FTTN facilities in Telecom Regulatory Policy 2010-632 was no longer supported. It determined that the 10% supplementary markup that has applied to both the access and the usage components of aggregated wholesale HSA services should not be maintained effective the date the rates were made interim, that is, 31 March 2016.

#### **Positions of parties**

342. TCI requested that the Commission review and vary its determination related to the retroactive application of the removal of the 10% supplementary markup. TCI submitted that the markup is the amount that is added to the Commission-approved costs and is a decision related to pricing, consistent with past Commission decisions, such as Telecom Decision 2002-34 and Telecom Order 2016-396. TCI further submitted that the issue of the markup was only introduced in the proceeding that led

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<sup>38</sup> An investment project is deemed to be economically viable if the return on investment exceeds a required minimum return, or hurdle rate.

to Telecom Order 2019-288 through a request for information by Commission staff in 2018. TCI argued that the change in markup retroactive to 2016 is not appropriate given the issue was not mentioned until several years later.

343. TCI submitted that service providers are only responsible for the correct application of costing methodology in proposing rates when employing the Phase II costing methodology. This is supported by Telecom Decision 2002-34, in which the Commission reviewed the level of markup and stated that it is a determination related to pricing rather than costing.
344. TCI also submitted that reviewing the markup is a complex process that should be undertaken separately. It indicated that markup changes were prospective in Telecom Decisions 2002-34 and 2013-73. In addition, the Commission did not consider it necessary or appropriate to apply retroactive changes because they were not the result of costing errors.
345. TCI submitted that the 10% supplementary markup is a fundamental pricing parameter that the company has relied on since it was set in Telecom Regulatory Policy 2010-632 and argued that wholesale HSA service providers should not be penalized for changes to pricing policy consistent with past Commission decisions.
346. Allstream and CNOC submitted that Telecom Order 2019-288 affected only the 10% supplementary markup and argued that the Commission's evaluation of the appropriateness of the markup applicable to FTTN facilities is straightforward.
347. CNOC submitted that TCI misrepresented Telecom Decision 2013-73, wherein the Commission's determinations for business wholesale HSA service rates were anchored on an assessment of the market share of independent service providers. CNOC submitted that, in Telecom Decision 2013-73, the Commission stated that the current market share of independent service providers in the retail business Internet service market does not justify maintaining the higher business wholesale HSA service rate markup.
348. CNOC argued that Telecom Decision 2013-73 supports the determination in Telecom Order 2019-288 that the 10% supplementary markup should not be maintained, because the Commission was of the view that the markup, which applied from November 2011 to March 2016, generated sufficient revenue for the ILECs to realize a reasonable return on FTTN investments, resulting in adequate compensation for the ILECs' FTTN investment risk.

#### **Commission's analysis and determinations**

349. In their review and vary applications, parties did not contest that the 10% supplementary markup should be removed. The Commission considers that the issue at hand is the applicable date that the supplementary markup should be removed.
350. While the markup has historically been adjusted through separate processes, this has not been the case for the supplementary markup. Accordingly, the Commission considers that a separate process is not required to adjust or remove the supplementary markup.

351. As to TCI's argument that the Commission cannot apply the supplementary markup back to the date the rates were set interim because it did not do so in Telecom Decision 2002-34, the Commission considers that this situation is different. In that case, the Commission reduced the markup to reflect a review of fixed common expenses and to support facilities-based competition, whereas the 10% supplementary markup for aggregated wholesale HSA service was established to recognize the additional risk in deploying FTTN facilities as compared to deploying other facilities. The Commission considers that the policy considerations in reducing the markup in Telecom Decision 2002-34 are not relevant in the present case, since the reduction of the markup only reflects that the risk identified in Telecom Regulatory Policy 2010-632 was no longer present as of 2016.
352. TCI argued that the effective date for the removal of the 10% supplementary markup should be the publication date of Telecom Order 2019-288, consistent with the Commission's past decisions when adjusting the markup. However, TCI did not provide any evidence to demonstrate that the risk underlying the purpose of the markup was still prevalent on the effective date determined by the Commission (i.e. 31 March 2016), when the rates were made interim.
353. In light of the above, the Commission considers that TCI has not demonstrated substantial doubt as to the correctness of the determination that the 10% supplementary markup was no longer supported on the effective date determined by the Commission.
354. The Commission therefore **denies** TCI's request to vary the determination in Telecom Order 2019-288 to remove the 10% supplementary markup effective the date of that order (i.e. 15 August 2019).

## **Speed banding**

### **Background**

355. In Telecom Decision 2016-117, the Commission determined that rate setting for all wholesale HSA services is to be done in accordance with a speed-banding approach and directed all wholesale HSA service providers to file new tariff applications.
356. In Telecom Orders 2016-396 and 2016-448, the Commission revised the proposed aggregated wholesale HSA service rates and approved banded access rates for Eastlink, SaskTel, Shaw, and TCI.
357. Further, in Telecom Order 2016-396, the Commission determined that the access portion of the aggregated wholesale HSA service rates of Bell Canada, Bell MTS, Cogeco, RCCI, and Videotron, made interim on 31 March 2016 in Telecom Decision 2016-117, would remain unchanged at that time.
358. In Telecom Order 2019-288, the Commission approved banded access rates for Bell Canada, Bell MTS, Cogeco, Eastlink, RCCI, SaskTel, Shaw, TCI, and Videotron.

## Commission's analysis and determinations

359. The Commission's determination to finalize the review and vary process and make the interim rates final will result in a partial implementation of the speed-banding approach. The Commission notes that the interim aggregated wholesale HSA access rates approved in Telecom Orders 2016-396 and 2016-448, which included speed banding, were limited to Eastlink, SaskTel, Shaw, and TCI. As such, speed-banding had not been implemented for Bell Canada, Bell MTS, Cogeco, RCCI, and Videotron prior to the issuance of Telecom Order 2019-288.
360. The Commission considers that partially implementing the speed-banding approach would result in asymmetrical treatment of wholesale HSA service providers, resulting in regulatory inefficiency. For wholesale HSA service providers with speed banding implemented, future services would require a cost study only for services that did not fall within an approved speed-band range to set rates. For wholesale HSA service providers without speed banding implemented, all future service speeds would require a cost study to set rates.
361. This concern is highlighted as wholesale HSA service providers continue to offer new services,<sup>39</sup> and the partial implementation of the speed-banding approach could result in different regulatory treatment in setting rates for these services.
362. To address the concern of partially implementing the speed-banding approach, Bell Canada, Bell MTS, Cogeco, RCCI, and Videotron proposed banded access rate ranges in the proceeding that led to Telecom Order 2019-288. The Commission considers that these rate ranges should be implemented from the date of this decision.
363. The Commission notes that each proposed banded access rate range included interim access rate(s) for the aggregated wholesale HSA service, and that banded access rates could thus be set by assigning the highest interim access rate within the proposed banded access rate ranges.
364. This approach would apply only to future competitor end-users who acquire new services at the banded access rates set in this decision. It would not apply to existing competitor end-users whose interim access rates are lower than the recommended highest interim access rate within the proposed banded access rate range, for as long as they do not change their service.
365. The Commission considers that the unique circumstance of a partially implemented speed-banding approach, along with the fact that aggregated wholesale HSA services are not mandated, supports using measures that are efficient and proportionate to implement banded access rates.

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<sup>39</sup> For example, Cogeco filed an application to introduce new speed tiers in Tariff Notice 61, which was approved on an interim basis in Telecom Order 2020-372.

366. In light of the above unique circumstances, the Commission determines that the banded access rates for Bell Canada, Bell MTS, Cogeco, RCCI, and Videotron will be set using the highest interim access rate for the aggregated wholesale HSA service within the proposed banded access rate ranges; the banded access rates apply only to new end-users of competitors who acquire new services.

367. The Commission notes that, with the implementation of banded access rates for all wholesale HSA service providers, cost studies will be required only to approve rates for future services that are not within an approved banded access rate range.

### **Freezing access rates for aggregated wholesale HSA service**

#### **Background**

368. In Telecom Regulatory Policy 2015-326, the Commission reviewed wholesale wireline services and associated policies in the context of the wholesale service framework, including the approach it uses to set the rates for wholesale services.

369. The Commission determined that freezing rates for certain legacy wholesale services, as proposed by Bell Aliant Regional Communications, Limited Partnership and Bell Canada, would serve to lower the regulatory burden associated with cost study filings without impairing the Commission's ability to find rates just and reasonable. The Commission, however, determined that in order to balance the interests of the incumbents and the competitors, the final rates of these services should also take into account whether their costs have decreased or increased. The Commission therefore approved the request to freeze the existing rates of certain legacy wholesale services.<sup>40</sup>

370. Since Telecom Regulatory Policy 2015-326 was issued, the Commission has reviewed additional requests to freeze rates for other wholesale services on a case-by-case basis.<sup>41</sup> Approval for such requests takes into consideration the specific arguments put forward by parties, and these arguments must demonstrate that the market conditions are such that a rate freeze would lower the regulatory burden while maintaining rates that are just and reasonable.

371. In the proceeding that led to Telecom Order 2019-288, Bell Canada filed cost studies in support of the monthly access rates for its aggregated wholesale HSA service. These cost studies included the number of wholesale customers who were using the aggregated wholesale HSA service as well as the number of wholesale customers that Bell Canada forecast to be using the services over a period of time.

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<sup>40</sup> The Commission froze at existing levels the rates for the incumbents' wholesale legacy services, defined as unbundled local loops, DSL services not provided over next-generation mixed fibre/copper networks, such as FTTN, and low-speed competitor digital network (CDN) access services (i.e. DS-0 and DS-1 CDN accesses).

<sup>41</sup> In Telecom Decisions 2018-18 and 2019-74, the Commission assessed market conditions, which included a review of end-users using the services.

372. In Telecom Order 2019-288, the Commission determined that it was premature to freeze Bell Canada's access rates for aggregated wholesale HSA service because ILECs continued to deploy FTTN facilities and continued to have a significant number of customers still using these facilities.

#### **Positions of parties**

373. Bell Canada submitted that the Commission erred in fact in declining its request to freeze the company's access rates for aggregated wholesale HSA service.

374. Bell Canada submitted that in Telecom Regulatory Policy 2015-326, the Commission determined that if a wholesale service was a legacy service, then the associated rate should be frozen. Bell Canada argued that the Commission recognized in Telecom Order 2019-288 that FTTN had become a legacy technology through its determination to remove the supplementary markup. Bell Canada further submitted that, because aggregated wholesale HSA service employs legacy technology, the reduction in rates for the service determined in Telecom Order 2019-288 would be contrary to determinations reached in Telecom Regulatory Policy 2015-326.

375. Bell Canada also submitted that in Telecom Regulatory Policy 2015-326, the Commission did not take into consideration the number of existing customers for the other legacy services when the rates were frozen. Specifically, at the time the rates were frozen, the existing base of customers was relatively large for those legacy services. Bell Canada therefore argued that the Commission's rationale for its determination in Telecom Order 2019-288 not to freeze the rates does not hold.

376. Bell Canada provided updated existing and 2020 forecasted customer numbers for its access service for its aggregated wholesale HSA service and submitted that, while its existing customer base is larger, the updated number of customers forecasted in 2020 will be lower than the number of existing customers for the other legacy services at the time their rates were frozen.

377. CNOC argued that there is no credibility to Bell Canada's concern that there is substantial doubt as to the correctness of Telecom Order 2019-288 due to prospective costs of legacy wholesale services.

378. Bell Canada replied that CNOC failed to address the argument that the use of forward-looking incremental costs is inappropriate for setting the rate for a legacy wholesale service, nor did it address the appropriateness of rates for such services being frozen. Bell Canada also noted that CNOC did not comment on the removal of the supplementary markup and its applicability to legacy wholesale services.

#### **Commission's analysis and determinations**

379. Bell Canada argued that the removal of the supplementary markup resulted in defining the underlying technology as legacy. Bell Canada also submitted that, consistent with Telecom Regulatory Policy 2015-326, legacy wholesale service rates should be frozen.

380. However, as discussed in the supplementary markup section earlier, the Commission considers that the removal of the supplementary markup reflected that the risk of deploying FTTN facilities, compared to other facilities, was no longer present. It does not, on its own, indicate that the facilities that provide aggregated wholesale HSA services are legacy facilities.
381. The Commission has reviewed the information provided by Bell Canada in support of its review and vary application and notes that the existing customer base for Bell Canada's aggregated wholesale HSA service is significantly larger than the existing customer bases of other legacy wholesale services when the rates for those services were frozen.
382. Further, Bell Canada's updated existing and forecasted customer numbers for aggregated wholesale HSA service are significantly lower than indicated in the evidence filed in the proceeding that led to Telecom Order 2019-288 to support the proposed monthly access rates for this service. However, even with the updated customer information, the Commission considers that there is still a large number of customers using the service.
383. Given that the Commission considered the number of customers using facilities (i.e. existing customers as well as growth in customers) in its assessment of recent requests to freeze wholesale service rates, as mentioned above the Commission is of the view that it was reasonable to assess the number of existing customers and growth in customers in the review of the request to freeze Bell Canada's rates for access service related to aggregated wholesale HSA service.
384. In light of the above, the Commission determines that Bell Canada has not raised substantial doubt as to the correctness of the finding in Telecom Order 2019-288 that aggregated wholesale HSA service is not a legacy service.

### **Associated tariff applications**

385. The wholesale HSA service providers submitted a number of tariff notices (TNs) associated with their respective aggregated wholesale HSA services, which the Commission approved on interim basis in various orders. The Commission notes that the rates approved on a final basis in this decision cover certain service offerings at issue in those TNs. Accordingly, the Commission also sets final rates, identified in the Appendix to this decision, related to aggregated wholesale HSA service in the following TNs that are covered in this order:

- Bell Canada TN 7594
- Cogeco TN 61
- RCCI TNs 61, 61A, 62, and 62A
- Shaw TNs 31, 32, 35, 35A, and 37
- Videotron TN 56

## Policy Directions

386. The 2019 Policy Direction provides that, when the Commission is exercising its powers and performing its duties under the Act, it should consider how its decisions can promote competition, affordability, consumer interests, and innovation.
387. Moreover, the Commission should, in its decisions, demonstrate its compliance with the 2019 Policy Direction and specify how those decisions can, as applicable, promote competition, affordability, consumer interests, and innovation.
388. The Commission considers that its determinations to vary the final rates set in Telecom Order 2019-288 and to revert to the interim rates (revised to remove the supplementary markup), set them as final, apply the final rates retroactively, and implement banded access rates for the remaining wholesale HSA service providers is consistent with subparagraphs 1(a)(i), (iii), (v), (vi), and (vii) of the 2019 Policy Direction, which states that the Commission should consider the extent to which its decisions
- i. encourage all forms of competition and investment;
  - iii. ensure that affordable access to high-quality telecommunications services is available in all regions of Canada, including rural areas;
  - v. reduce barriers to entry into the market and to competition for telecommunications service providers that are new, regional or smaller than the incumbent national service providers;
  - vi. enable innovation in telecommunications services, including new technologies and differentiated service offerings; and
  - vii. stimulate investment in research and development and in other intangible assets that support the offer and provision of telecommunications services.
389. The Commission considers that its determinations in this decision will advance the objectives in subparagraphs 1(a)(i) and 1(a)(iii) by setting wholesale HSA service rates that have supported continued growth for competitors and investments in the high-speed Internet service market since 2016. The Commission notes that its determinations will also allow for continued investments in telecommunications by wholesale HSA service providers, particularly investments that could be made in rural areas. Consistent with subparagraph 1(a)(v), the Commission considers that its determinations will reduce the significant asymmetry between aggregated wholesale HSA service rates offered by ILECs and cable carriers, leading to increased competition between wholesale HSA service providers.
390. Consistent with subparagraphs 1(a)(vi) and 1(a)(vii), the Commission considers that its determination to implement banded access rates for the remaining wholesale HSA service providers will enable competitors to have more flexibility in service innovation using differentiated service offerings. The Commission further considers that its determinations will stimulate and promote the development and transition to

the future mandated disaggregated wholesale HSA service framework, while continuing to support the existing aggregated wholesale HSA service framework and removing any current regulatory uncertainty.

391. The Commission also considers that the determinations made in this decision are consistent with the 2006 Policy Direction for the reasons set out below.
392. The 2006 Policy Direction states that the Commission, in exercising its powers and performing its duties under the Act, shall implement the policy objectives set out in section 7 of the Act, in accordance with paragraphs 1(a), (b), and (c) of the 2006 Policy Direction.
393. The issues under consideration in this decision relate to the provision of wholesale services and their associated impact on competition in the respective downstream retail markets. Therefore, subparagraphs 1(a)(i) and (ii)<sup>42</sup> and subparagraphs 1(b)(i), (ii), and (iv)<sup>43</sup> of the 2006 Policy Direction apply to the Commission's determinations.
394. In compliance with subparagraph 1(b)(i) of the 2006 Policy Direction, the Commission considers that the policy objectives set out in paragraphs 7(a), (b), (c), and (f) of the Act<sup>44</sup> are advanced by the regulatory measures determined in this decision. As noted above, the rates finalized in this decision have, since 2016, led to growth in both competition and facilities investment in the high-speed Internet service market, furthering the objectives of paragraphs 7(a), (b), and (c) of the Act. Further, the Commission considers that its determinations in this decision will provide regulatory certainty to the industry, correct significant rate asymmetry concerns between wholesale HSA service providers, lead to increased competition between wholesale HSA service providers, and allow for the more timely implementation of the disaggregated HSA service framework, a more efficient regulatory alternative, in accordance with the objective of paragraph 7(f) of the Act.

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<sup>42</sup> Paragraph 1(a) states that the Commission should (i) rely on market forces to the maximum extent feasible as the means of achieving the telecommunications policy objectives, and (ii) when relying on regulation, 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.

<sup>43</sup> Paragraph 1(b) states, among other things, that the Commission, when relying on regulation, should use measures that satisfy the following criteria, namely, those that (i) specify the telecommunications policy objective that is advanced by those measures and demonstrate their compliance with the Policy Direction, (ii) if they are of an economic nature, neither deter economically efficient competitive entry into the market nor promote economically inefficient entry, and (iv) if they relate to network interconnection arrangements or regimes for access to networks, buildings, in-building wiring or support structures, ensure the technological and competitive neutrality of those arrangements or regimes, to the greatest extent possible, to enable competition from new technologies and not to artificially favour either Canadian carriers or resellers.

<sup>44</sup> The cited policy objectives of the Act are 7(a) to facilitate the orderly development throughout Canada of a telecommunications system that serves to safeguard, enrich and strengthen the social and economic fabric of Canada and its regions; (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; (c) to enhance the efficiency and competitiveness, at the national and international levels, of Canadian telecommunications; and (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.

395. Consistent with subparagraph 1(a)(i) of the 2006 Policy Direction, the Commission, with respect to its determination regarding the setting of final rates, relied to the maximum extent feasible on market forces by making final the interim aggregated wholesale HSA service rates established in 2016 or earlier, and under which competitive independent service providers continued to grow their customer bases and shares of the market.
396. Consistent with subparagraphs 1(a)(ii) and 1(b)(ii) of the 2006 Policy Direction, the Commission considers that the regulatory measures determined in this decision are (i) efficient and proportionate to their purpose, and minimally interfere with market forces; and (ii) neither deter economically efficient competitive entry into the market nor promote economically inefficient entry. In this regard, the Commission notes its determinations to conclude the review and vary process and make the interim aggregated wholesale HSA service rates final will provide regulatory certainty to the industry; correct significant rate asymmetry concerns between wholesale HSA service providers, leading to increased competition between them; and continue to give competitors an opportunity to attract and grow their customer bases. In addition, the Commission's determination to implement speed banding for Bell Canada, Bell MTS, Cogeco, RCCI, and Videotron will minimally interfere with the market and be efficient by allowing for new service offerings to be approved faster and without the requirement to provide a cost study, as applicable.
397. Consistent with subparagraph 1(b)(iv) of the 2006 Policy Direction, the Commission's determinations, as they relate to network interconnection arrangements or regimes for access to networks, are technologically and competitively neutral and do not artificially favour either Canadian carriers or resellers. In this regard, the Commission notes that its determinations will address the concern regarding significant aggregated wholesale HSA service rate asymmetry between cable carriers and ILECs.

Secretary General

### **Related documents**

- Telecom Order CRTC 2020-372, 10 November 2020
- *Requests to stay the implementation of Telecom Order 2019-288 regarding final rates for aggregated wholesale high-speed access services*, Telecom Decision CRTC 2020-342, 28 September 2020
- *Call for comments – Appropriate network configuration for disaggregated wholesale high-speed access services*, Telecom Notice of Consultation CRTC 2020-187, 11 June 2020; as amended by Telecom Notice of Consultation CRTC 2020-187-1, 22 July 2020
- *Call for comments – Review of the approach to rate setting for wholesale telecommunications services*, Telecom Notice of Consultation CRTC 2020-131, 24 April 2020; as amended by Telecom Notices of Consultation CRTC 2020-131-1, 7 July 2020; and 2020-131-2, 19 October 2020

- *Videotron Ltd. – Application to withdraw the Download 501-1000 Mbps, Upload 0-100 Mbps disaggregated service and to destandardize the Download up to 940 Mbps, Upload up to 50 Mbps aggregated service*, Telecom Order CRTC 2020-123, 14 April 2020
- *Follow-up to Telecom Orders 2016-396 and 2016-448 – Final rates for aggregated wholesale high-speed access services*, Telecom Order CRTC 2019-288, 15 August 2019; as amended by Telecom Order CRTC 2019-288-1, 19 August 2019
- *TELUS Communications Inc. – Application to modify the provision of various wholesale services*, Telecom Decision CRTC 2019-74, 14 March 2019
- Telecom Order CRTC 2018-40, 1 February 2018
- *Bell Canada – Application to modify the provision of various wholesale services*, Telecom Decision CRTC 2018-18, 17 January 2018
- *Interim rates for disaggregated wholesale high-speed access services in Ontario and Quebec*, Telecom Order CRTC 2017-312, 29 August 2017; as amended by Telecom Order CRTC 2017-312-1, 12 September 2017
- Telecom Order CRTC 2017-184, 5 June 2017
- *Bragg Communications Incorporated, operating as Eastlink – Revised interim rates for aggregated wholesale high-speed access service*, Telecom Order CRTC 2016-448, 10 November 2016
- *Tariff notice applications concerning aggregated wholesale high-speed access services – Revised interim rates*, Telecom Order CRTC 2016-396, 6 October 2016
- *Follow-up to Telecom Regulatory Policy 2015-326 – Implementation of a disaggregated wholesale high-speed access service, including over fibre-to-the premises access facilities*, Telecom Decision CRTC 2016-379, 20 September 2016
- *Review of costing inputs and the application process for wholesale high-speed access services*, Telecom Decision CRTC 2016-117, 31 March 2016
- *Review of wholesale wireline services and associated policies*, Telecom Regulatory Policy CRTC 2015-326, 22 July 2015; as amended by Telecom Regulatory Policy CRTC 2015-326-1, 9 October 2015
- *Review of costing inputs and application process for wholesale high-speed access services*, Telecom Notice of Consultation CRTC 2015-225, 28 May 2015; as amended by Telecom Notice of Consultation CRTC 2015-225, 3 July 2015
- *Canadian Network Operators Consortium Inc. – Application to review and vary Telecom Regulatory Policies 2011-703 and 2011-704*, Telecom Decision CRTC 2013-73, 21 February 2013

- *Applications to review and vary Telecom Decision 2011-24 regarding rates for unbundled local loops provided by Bell Aliant Regional Communications, Limited Partnership and Bell Canada in Ontario and Quebec*, Telecom Decision CRTC 2012-628, 15 November 2012
- *Billing practices for wholesale business high-speed access services*, Telecom Regulatory Policy CRTC 2011-704, 15 November 2011
- *Billing practices for wholesale residential high-speed access services*, Telecom Regulatory Policy CRTC 2011-703, 15 November 2011; as amended by Telecom Regulatory Policy CRTC 2011-703-1, 22 December 2011
- *Revised guidelines for review and vary applications*, Telecom Information Bulletin CRTC 2011-214, 25 March 2011
- *Wholesale high-speed access services proceeding*, Telecom Regulatory Policy CRTC 2010-632, 30 August 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
- *Review of the use of company-specific working fill factors and the recovery of past introduction costs not fully recovered*, Telecom Regulatory Policy CRTC 2009-274, 14 May 2009
- *Regulatory Economic Studies Manuals – Follow-up proceeding to Telecom Decision 2008-14*, Telecom Order CRTC 2008-237, 25 August 2008
- *Revised regulatory framework for wholesale services and definition of essential services*, 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
- *Bell Canada and TCC – Co-location power service rates*, Telecom Decision CRTC 2006-42, 30 June 2006; as amended by Telecom Decision CRTC 2006-42-1, 25 August 2006
- *Aliant Telecom, Bell Canada, MTS Allstream, SaskTel and TCI – Approval of rates on a final basis for Access Tandem service*, Telecom Decision CRTC 2006-22, 27 April 2006
- *Regulatory framework for second price cap period*, Telecom Decision CRTC 2002-34, 30 May 2002
- *Terms and rates approved for large cable carriers' higher speed access service*, Order CRTC 2000-789, 21 August 2000
- *Access rates for exempt programming undertakings*, Public Notice CRTC 1997-35, 2 April 1997
- *Call for comments on a proposed access rate for exempt programming undertakings*, Public Notice CRTC 1996-132, 2 October 1996

## Appendix to Telecom Decision CRTC 2021-181

### Approved final rates for aggregated wholesale HSA service

#### CBB model – Final monthly capacity rate per 100 Mbps service

Company	Rate
Bell Canada	\$138.43
Bell MTS	\$88.14
Cogeco	\$323.73
Eastlink	\$353.35
RCCI	\$319.68
Shaw	\$296.10
Videotron	\$395.36

#### Cable carriers: Final monthly access rate per end-user

##### Cogeco

Speed band	Service speed	Rate
1	0-6 Mbps downstream	\$12.73
2	7-15 Mbps downstream	\$14.78
3	16-40 Mbps downstream	\$15.06
4	41-60 Mbps downstream	\$24.98
5	61-120 Mbps downstream	\$42.05
6	121-250 Mbps downstream	\$51.25

##### Eastlink

Speed band	Service speed	Rate
1	0-5 Mbps downstream / Up to 1 Mbps upstream	\$11.40
2	6-30 Mbps downstream / Up to 3 Mbps upstream	\$16.23
3	31-50 Mbps downstream / Up to 5 Mbps upstream	\$18.57
4	51-100 Mbps downstream / Up to 10 Mbps upstream	\$25.47
5	101-150 Mbps downstream / Up to 10 Mbps upstream	\$31.32
6	151-300 Mbps downstream / Up to 10 Mbps upstream	\$34.14
7	301-400 Mbps downstream / Up to 10 Mbps upstream	\$44.09
8	401-940 Mbps downstream / Up to 10 Mbps upstream	\$55.51

**RCCI**

<b>Speed band</b>	<b>Service speed</b>	<b>Rate</b>
1	0-15 Mbps downstream / Up to 1 Mbps upstream	\$19.25
2	16-30 Mbps downstream / Up to 5 Mbps upstream	\$22.50
3 <sup>45</sup>	31-60 Mbps downstream / Up to 10 Mbps upstream	\$28.65
4	61-100 Mbps downstream / Up to 10 Mbps upstream	\$23.32
5	101-250 Mbps downstream / Up to 20 Mbps upstream	\$49.06
6	251-500 Mbps downstream / Up to 20 Mbps upstream	\$49.06
7	501-750 Mbps downstream / Up to 20 Mbps upstream	\$49.06
8	751-1024 Mbps downstream / Up to 50 Mbps upstream	\$49.06

**Shaw**

<b>Speed band</b>	<b>Service speed</b>	<b>Rate</b>
1	0-10 Mbps downstream / Up to 1 Mbps upstream	\$9.34
2	11-29 Mbps downstream / Up to 5 Mbps upstream	\$11.23
3	30-49 Mbps downstream / Up to 8 Mbps upstream	\$14.91
4	50-99 Mbps downstream / Up to 10 Mbps upstream	\$20.52
5	100-129 Mbps downstream / Up to 15 Mbps upstream	\$28.17
6	130-250 Mbps downstream / Up to 20 Mbps upstream	\$41.36
7	251-500 Mbps downstream / Up to 50 Mbps upstream	\$50.84

**Videotron**

<b>Speed band</b>	<b>Service speed</b>	<b>Rate</b>
1	0-5 Mbps downstream / Up to 1 Mbps upstream	\$12.79
2	6-10 Mbps downstream / Up to 1.5 Mbps upstream	\$15.37
3	11-30 Mbps downstream / Up to 10 Mbps upstream	\$23.77
4	31-60 Mbps downstream / Up to 10 Mbps upstream	\$26.89
5	61-120 Mbps downstream / Up to 20 Mbps upstream	\$37.01
6	121-200 Mbps downstream / Up to 20 Mbps upstream	\$53.15
7	201-500 Mbps downstream / Up to 30 Mbps upstream	\$53.15
8 <sup>46</sup>	501-1000 Mbps downstream / Up to 100 Mbps upstream	\$81.60

<sup>45</sup> The approved rate in this band was associated with RCCI's up to 60 Mbps downstream / up to 10 Mbps upstream aggregated service. In Telecom Order 2017-184, the Commission approved RCCI's request to destandardize this service.

**ILECs: Final monthly access rates per end-user****Bell Canada**

<b>Speed band</b>	<b>Service speed</b>	<b>Rate</b>
Non-bonded	All	\$23.79
Bonded	All	\$48.58

**Bell MTS**

<b>Speed band</b>	<b>Service speed</b>	<b>Rate</b>
VDAS [Very High-Speed Digital Subscriber Line Data Access Service] 30 Mbps	VDAS 30 Mbps	\$21.43
VDAS 50 Mbps	VDAS 50 Mbps	\$24.83
VDAS 75 Mbps	VDAS 75 Mbps	\$24.83
VDAS 100 Mbps	VDAS 100 Mbps	\$24.83

**Flat-rate model: Final banded access rates****TCI**

<b>Speed band</b>	<b>Service speed</b>	<b>Rate</b>
15 Mbps	10-19 Mbps	\$20.21
25 Mbps	20-29 Mbps	\$21.90
50 Mbps non-bonded	30-69 Mbps	\$24.34
50 Mbps bonded	30-69 Mbps	\$34.40
75 Mbps non-bonded	70-100 Mbps	\$29.05
75 Mbps bonded	70-100 Mbps	\$37.38
100 Mbps bonded <sup>47</sup>	70-100 Mbps	\$37.38
150 Mbps bonded	101-150 Mbps	\$57.66

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<sup>46</sup> In Telecom Order 2020-123, the Commission approved Videotron's request to destandardize its aggregated service for up to 940 Mbps downstream / up to 50 Mbps upstream.

<sup>47</sup> In Telecom Order 2018-40, the Commission approved TCI's request to withdraw its 100 Mbps bonded service.

**SaskTel**

<b>Service speed</b>	<b>Rate</b>
VDSL 25 Mbps	\$17.72

**Final monthly interface charges****SaskTel**

<b>Service type</b>	<b>Charge</b>
VDSL interface	\$274.99

**Final monthly service charges****Bell Canada**

<b>Service type</b>	<b>Charge</b>
FTTN bonded installation	\$167.84

**SaskTel**

<b>Service type</b>	<b>Charge</b>
VDSL access service charge	\$105.04
VDSL interface service charge (1000 Mbps)	\$411.45
Diagnostic maintenance charge per hour	\$99.72
Virtual local area network remapping charge per VDSL access	\$52.44

**Approved final rates for other TNs associated with aggregated wholesale HSA service****Final monthly access rates per end-user**

<b>Company</b>	<b>TN</b>	<b>Description</b>	<b>Rate</b>
Bell Canada	7594	Business bonded service for GAS [Gateway Access Service]-FTTN	\$48.58
Cogeco	61	TPIA [third-party Internet access] – Introduction of 90 Mbps download / 10 Mbps upload	\$42.05
Cogeco	61	TPIA – Introduction of 180 Mbps download / 10 Mbps upload	\$51.25

RCCI	61 and 61A	TPIA – Introduction of 300 Mbps download / 20 Mbps upload	\$49.06
RCCI	62 and 62A	TPIA – Introduction of 10 Mbps download / 1 Mbps upload	\$19.25
Shaw	31	TPIA – Introduction of 100 Mbps download / 10 Mbps upload	\$28.17
Shaw	32	TPIA – Introduction of 10 Mbps download / 1 Mbps upload	\$9.34
Shaw	32	TPIA – Introduction of 150 Mbps download / 10 Mbps upload	\$41.36
Shaw	32	TPIA – Introduction of 300 Mbps download / 15 Mbps upload	\$50.84
Shaw	35 and 35A	TPIA – Introduction of 150 Mbps download / 15 Mbps upload	\$41.36
Shaw	35 and 35A	TPIA – Introduction of 300 Mbps download / 100 Mbps upload	\$50.84
Shaw	37	TPIA – Introduction of 500 Mbps download / 20 Mbps upload	\$50.84
Videotron	56	TPIA – Introduction of 100 Mbps download / 30 Mbps upload	\$37.01

**Final monthly service charges**

<b>Company</b>	<b>TN</b>	<b>Description</b>	<b>Charge</b>
Bell Canada	7594	Business bonded service for GAS-FTTN	\$167.84