



## Telecom Order CRTC 2016-396

PDF version

Reference: Telecom Decision 2016-117

Ottawa, 6 October 2016

*File numbers: Bell Canada Tariff Notice 7504; Cogeco Tariff Notices 52 and 52A; MTS Tariff Notices 778 and 778A; RCCI Tariff Notice 45; SaskTel Tariff Notices 329 and 329A; Shaw Tariff Notices 26 and 26A; TCC Tariff Notice 512; Videotron Tariff Notice 52*

### **Tariff notice applications concerning aggregated wholesale high-speed access services – Revised interim rates**

*The Commission sets revised interim rates for aggregated wholesale high-speed access (HSA) services for Bell Canada, Cogeco, MTS, RCCI, SaskTel, Shaw, TCC, and Videotron.*

*The Commission's revisions to the proposed rates are required in order to ensure that the interim rates are not based on overstated costs.*

*The Commission is concerned that certain wholesale HSA service providers have not conducted their cost studies in accordance with Phase II costing principles, as detailed in their Regulatory Economic Studies Manuals (the Manual), and have not justified departure from the principles and methodologies set out in the Manual.*

*The Commission expresses significant concern that most wholesale HSA service providers chose to disregard Commission staff's guidance, the Manual, and past Commission determinations.*

#### **Background**

1. The Commission regulates aggregated wholesale high-speed access (HSA) services provided by the large cable and telephone companies (collectively, the wholesale HSA service providers). Competitors<sup>1</sup> can use these services to provide their own retail Internet services and other services.
2. In Telecom Notice of Consultation 2015-225 (the Notice), the Commission initiated a proceeding to examine certain issues associated with non-legacy aggregated wholesale HSA services. Prior to the publication of the Notice, the Commission received a Part 1 application<sup>2</sup> from the Canadian Network Operators Consortium Inc. (CNOc), in which CNOc raised concerns that certain usage-sensitive rates for the aggregated wholesale HSA services were no longer just and reasonable. CNOc requested that the Commission make interim usage-sensitive rates - including the monthly capacity rate per 100 megabits per

<sup>1</sup> For the purpose of this order, "Competitors" are the customers of wholesale HSA services. Competitors purchase access to wholesale HSA services to provide (or resell) telecommunications services to their own end-users.

<sup>2</sup> The Canadian Network Operators Consortium Inc.'s application dated 29 April 2015 is related to making usage-sensitive rates interim.

second (Mbps) service - for certain aggregated wholesale HSA services. The Commission merged the proceedings initiated by CNOC's Part 1 application and the Notice.

3. In Telecom Decision 2016-117, the Commission provided its determinations with respect to the issues raised in the Notice and CNOC's Part 1 application. The Commission directed all wholesale HSA service providers to file new tariff applications for banded<sup>3</sup> non-legacy aggregated wholesale HSA service speeds, reflecting the Commission's determinations set out in that decision. The Commission also directed wholesale HSA service providers that use the capacity based billing (CBB) model<sup>4</sup> to file their updated monthly capacity rate per 100 Mbps.
4. Additionally, in Telecom Decision 2016-117, the Commission made interim, effective the date of the decision, all non-legacy aggregated wholesale HSA service rates that had been approved on a final basis, including the monthly capacity rates per 100 Mbps service. It did so on the basis that these rates were likely not just and reasonable, as demonstrated by the number of changes it made to various costing assumptions.

## Applications

5. The Commission received tariff applications, dated 30 June 2016, from Bell Canada, Cogeco Communications Inc. (Cogeco); MTS Inc. (MTS); Quebecor Media Inc., on behalf of Videotron G.P. (Videotron); Rogers Communications Canada Inc. (RCCI); Saskatchewan Telecommunications (SaskTel); Shaw Cablesystems G.P. (Shaw); and TELUS Communications Company (TCC).<sup>5</sup> On 27 June 2016, the Commission granted Bragg Communications Incorporated, carrying on business as Eastlink (Eastlink), an extension to 2 August 2016 for Eastlink to file its tariff application and supporting cost study. On 28 July 2016, Eastlink was granted a further extension to 9 September 2016.<sup>6</sup>
6. Submissions from the wholesale HSA service providers included revised cost studies in support of their proposed banded non-legacy aggregated wholesale HSA service speed rates, and for those wholesale HSA service providers that have opted for the CBB model (Bell Canada, Cogeco, MTS, RCCI, Shaw, and Videotron), revised cost studies in support of their proposed monthly capacity rate per 100 Mbps service.
7. The Commission received interventions from CNOC, IAAK Technologies, and Vaxination Informatique. These interventions generally identified issues with the wholesale HSA service providers' filings, such as proposed aggregated wholesale HSA rates which are significantly higher than rates for corresponding retail services, and requested immediate action be taken by the Commission.

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<sup>3</sup> Under this rate-setting approach, various service speeds with similar costs would be grouped in a band. A single access rate would apply for services within each band and this rate would be established on the basis of the weighted-average costs of all service speeds within the band.

<sup>4</sup> Rates determined using the CBB model have two components: (i) a monthly rate per speed band for access to the network, and (ii) a separate rate for capacity in increments of 100 Mbps. The CBB model requires that a Competitor determine in advance the amount of capacity it will need to provision Internet and other services to its end-users.

<sup>5</sup> Initial tariff applications were filed on 30 June 2016. Amendments to the applications were filed by Cogeco and MTS on 5 July 2016, SaskTel on 14 July 2016, and Shaw on 15 July 2016.

<sup>6</sup> Eastlink's cost proposals filed on 9 September 2016 will be dealt with in a separate order later this year.

8. On 29 July 2016, Commission staff issued a letter to all parties requesting that, for efficiency purposes, parties not file interventions with respect to the aggregated wholesale HSA tariff applications until further notice. Parties will be advised as to the next steps in the evaluation process in the near future by way of a procedural letter.
9. The public record of these proceedings is available on the Commission's website at [www.crtc.gc.ca](http://www.crtc.gc.ca) or by using the file numbers provided above.

## Issues

10. The Commission considers that the costing principles underpinning the rates proposed by most of the wholesale HSA service providers fail to comply with relevant Commission determinations and/or with Phase II costing principles.<sup>7</sup> Consequently, the Commission considers that the proposed rates, as filed, should not be approved on an interim basis and that Commission revisions to the proposed rates are required at this time in order to ensure that the interim rates are not based on overstated costs.
11. In addition to filing cost studies, Shaw proposed to transition from the flat rate billing model to the CBB model and proposed a minimum of 45 days for the transition. As a result of this billing model transition, the Commission must address aspects of both its access rate and monthly capacity rate per 100 Mbps if a transition is to be made.
12. In light of the above, the Commission has identified the following major issues to be addressed in this order:
  - Is Shaw's proposed transition from the flat rate billing model to the CBB model appropriate?
  - On a *prima facie* basis, are the rates proposed by wholesale HSA service providers based on reasonable costs?
  - Should the current interim aggregated wholesale HSA service rates be revised and approved on an interim basis?

### **Is Shaw's proposed transition from the flat rate billing model to the CBB model appropriate?**

13. Shaw has proposed to move from the flat rate billing model to the CBB model with a minimum of 45 days to transition to the CBB model. The Commission considers that Shaw should be subject to a defined transition period, and that 90 days is an appropriate time frame for Shaw's aggregated wholesale HSA customers to make the smooth transition from the flat rate billing model to the CBB model.
14. Accordingly, the Commission **approves** Shaw's transition of its aggregated wholesale HSA service offerings from the flat rate billing model to the CBB model. This transition is to occur within **45 to 90 days** from the date of this order.

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<sup>7</sup> Phase II costing principles reflect 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.

**On a *prima facie* basis, are the rates proposed by wholesale HSA service providers based on reasonable costs?**

15. In order to set wholesale HSA service rates, the Commission generally relies on the costing principles and methodologies defined in the Regulatory Economic Studies Manuals (the Manual), whereby service rates are set based on Phase II costs<sup>8</sup> plus a specified markup.<sup>9</sup>
16. The Manual is clear in that regulatory economic studies are to be developed in accordance with generally accepted economic concepts and methods and are to incorporate the prospective incremental costing principles and methodologies set out in Telecom Decision 79-16, as amended in subsequent Commission determinations.<sup>10</sup>
17. The Commission is concerned that certain wholesale HSA service providers have not conducted their cost studies in accordance with Phase II costing principles, as detailed in the Manual, and have not justified departures from the principles and methodologies set out in the Manual. The Commission has also identified several other costing issues that are addressed in this order.
18. More specifically, the Commission finds that certain wholesale HSA service providers have deviated from the Phase II capacity costing methodology. The capacity costing methodology requires dividing the total cost of a shared facility, for which growth technology<sup>11</sup> is used, by its maximum capacity and then dividing this result by the working fill factor.<sup>12</sup> Any deviation from this approach is not in accordance with the Phase II costing principles, and may result in an overstatement of costs.
19. The Commission has carefully reviewed each wholesale HSA service provider's cost estimates and determines that some of the proposed costs are not reasonable due to deviations from Phase II costing principles, the lack of pertinent costing details, including descriptions of input data variables, and modelling assumptions without supporting rationale. Accordingly, the Commission concludes that the proposed monthly rates for certain wholesale HSA service providers are, on a *prima facie* basis, not based on reasonable costs.

**Should the current interim aggregated wholesale HSA service rates be revised and approved on an interim basis?**

20. The Commission considers that the current interim monthly rates for wholesale HSA service providers should be revised to more accurately reflect the established costing principles.

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<sup>8</sup> Phase II costs are generated using a long-run incremental costing methodology which estimates the cost of serving an additional increment of demand for a particular service.

<sup>9</sup> Markup is the amount that is added to the Commission-approved costs to set the cost-based rate for a service. This difference between the rate and the Commission-approved costs serves as a contribution towards the company's fixed and common costs and a profit margin.

<sup>10</sup> Including Telecom Order 2008-237

<sup>11</sup> Growth technology refers to the technology the company will deploy going forward. The existing technology in place during the study period which is being gradually replaced by the growth technology should not be considered as growth technology.

<sup>12</sup> Working fill factor is a measure of the ultimate utilization of a shared facility and is used to recognize the non-working capacity (spare units, units required for maintenance (i.e. administrative) functions, etc.) of the shared facility, regardless of its current level of utilization, and to apportion the cost of non-working capacity to the per-unit cost of the working capacity. A lower working fill factor will result in higher costs.

21. In Telecom Procedural Letter dated 31 March 2016, Commission staff provided guidance with respect to the new tariff applications for banded non-legacy aggregated wholesale HSA service speeds. It was expected that wholesale HSA service providers would follow the guidelines when preparing their respective cost studies and filing their respective tariff applications. In addition, it was expected that wholesale HSA service providers would comply with the Manual and relevant past Commission determinations.
22. The Commission expresses its significant concern that most wholesale HSA service providers chose to disregard Commission staff's guidance, the Manual, and relevant past Commission determinations.
23. In order to ensure that the interim rates are based on proper costing principles and reasonable costs, the Commission has made a number of adjustments to the proposed costs related to the capacity costing approach and additional adjustments related to other issues. These adjustments, with rationale, are provided in Appendix 2 of this order.
24. In light of the above, the Commission **approves on an interim basis** the monthly rates set out in Appendix 1 of this order, effective the date of this order. Specifically, the Commission **approves on an interim basis** the revised monthly capacity rate per 100 Mbps service of Bell Canada, Cogeco, MTS, RCCI, Shaw, and Videotron; the capacity rate service charges proposed by Shaw; the revised banded access rates of Shaw and TCC; and SaskTel's proposed banded access rate.
25. These interim approved monthly rates reflect the wholesale HSA service providers' cost estimates submitted in response to Telecom Decision 2016-117, adjusted by the Commission to reflect the costing principles the wholesale HSA service providers should have applied, together with an appropriate markup.
26. These interim rates are based on an examination that is necessarily less than fully comprehensive. The establishment of the final rates will be based on a full review and assessment of the relevant cost inputs and costing methodologies.

## Implementation

27. The Commission **directs** the wholesale HSA service providers to issue tariff pages and update their websites, by **7 November 2016**, reflecting this order and the rates listed in Appendix 1 of this order. The access portion of the aggregated wholesale HSA service rates of Bell Canada, Cogeco, MTS, RCCI, and Videotron, made interim on 31 March 2016 in Telecom Decision 2016-117, remain unchanged at this time.
28. The Commission will assess the extent to which, if at all, retroactivity will apply when wholesale HSA service rates are set on a final basis.

Secretary General

## Related documents

- *Review of costing inputs and the application process for wholesale high-speed access services*, Telecom Decision CRTC 2016-117, 31 March 2016

- *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 2015-225-1, 3 July 2015
- *TELUS Communications Company - Provision of a new residential wholesale high-speed access service speed*, Telecom Order CRTC 2014-537, 17 October 2014
- *Shaw Cablesystems G.P. – Application to review and vary certain aspects of Telecom Regulatory Policy 2011-703*, Telecom Decision CRTC 2013-77, 21 February 2013
- *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
- *Wholesale high-speed access services proceeding*, Telecom Regulatory Policy CRTC 2010-632, 30 August 2010
- *Regulatory Economic Studies Manuals – Follow-up proceeding to Telecom Decision 2008-14*, Telecom Order CRTC 2008-237, 25 August 2008
- *Cogeco, Rogers, Shaw, and Videotron – Third-party Internet access service rates*, Telecom Decision CRTC 2006-77, 21 December 2006
- *Inquiry into Telecommunications Carriers' Costing and Accounting Procedures - Phase II: Information Requirements for New Service Tariff Filings*, Telecom Decision CRTC 79-16, 28 August 1979

## Appendix 1 to Telecom Order CRTC 2016-396

### Interim approved rates for non-legacy aggregated wholesale HSA services

**CBB model - Interim approved monthly capacity rate per 100 Mbps service for Bell Canada, Cogeco, MTS, RCCI, Shaw, and Videotron**

Company	Amount
Bell Canada	\$149.08
Cogeco	\$323.73
MTS	\$94.92
RCCI	\$319.68
Shaw	\$296.10
Videotron	\$395.36

### **CBB model – Interim approved banded access rates for Shaw**

Shaw banded access service speeds	Shaw monthly banded access rates per end-user (excluding usage)
Up to 10 Mbps	\$9.34
11 to 29 Mbps	\$11.23
30 to 49 Mbps	\$14.91
50 to 99 Mbps	\$20.52
100 to 129 Mbps	\$28.17
130 to 250 Mbps	\$41.36

### **CBB model – Interim approved capacity rate service charges for Shaw**

Shaw capacity rate service charges	One-time charge
Per-order rate	\$116.45
Per-interface rate	\$256.79

**Flat rate model - Interim approved banded access rates for TCC**

<b>TCC banded access service speeds</b>	<b>TCC monthly banded access rates per end-user</b>
10 to 19 Mbps	\$21.76
20 to 29 Mbps	\$23.58
30 to 69 Mbps	\$26.21
30 to 69 Mbps - Bonded	\$37.05
70 to 100 Mbps - Bonded	\$40.25

**Flat rate model - Interim approved banded access rate for SaskTel**

<b>SaskTel banded access service speeds</b>	<b>SaskTel monthly banded access rate per end-user</b>
11 to 25 Mbps	\$17.72



## Appendix 2 to Telecom Order CRTC 2016-396

### Adjustments

#### Bell Canada

Cost adjustments	Commission adjustment	Rationale for adjustment
Unrecovered costs	Removed unrecovered costs.	Bell Canada's proposed methodology to estimate unrecovered costs did not take into consideration actual capital expenditures.
Umbilical fibre costs	Removed umbilical fibre costs from the monthly capacity rate per 100 Mbps service.	At present, Bell Canada's umbilical fibre costs are recovered in the currently approved access portion of its aggregated wholesale HSA rate. Inclusion of these costs in the monthly capacity rate would lead to double counting of costs. The recovery of umbilical fibre costs will be addressed as part of the review process to finalize wholesale HSA rates.
Achieving productivity improvements costs	Removed productivity improvement costs.	Bell Canada considers that there is a correlation between its proposed productivity improvements costs and the Commission's unit cost change assumption of minus 26.4% without providing evidence on the record to demonstrate the causality between the two.
Backhaul costs	Estimated backhaul costs by applying the annual capital unit cost change assumption of minus 26.4% to Bell Canada's 2010 approved Installed First Costs (IFC) per Mbps.	Bell Canada's proposed 2016 backhaul costs are calculated without consideration to the capacity of the equipment and growth technology.

**Cogeco**

<b>Cost adjustments</b>	<b>Commission adjustment</b>	<b>Rationale for adjustment</b>
Cable Modem Terminating System (CMTS), node segmentation, and transport equipment costs	Adjusted node segmentation, transport equipment, and CMTS capital costs to reflect the appropriate working fill factors.	Cogeco provided no evidence to support deviations from the determinations made in Telecom Decision 2006-77, and Appendix V, Table 9 of the Manual.
Optical Node	Applied annual unit cost change assumption of minus 26.4% to Optical Node costs.	The annual unit cost change assumption of minus 26.4% was not applied as per Telecom Decision 2016-117.

**MTS**

<b>Cost adjustment</b>	<b>Commission adjustment</b>	<b>Rationale for adjustment</b>
Backhaul costs	Estimated backhaul costs by applying the annual capital unit cost change assumption of minus 26.4% to MTS' 2010 approved IFCs per Mbps.	MTS' proposed 2016 backhaul costs are calculated without consideration to the capacity of the equipment and growth technology.

**RCCI**

<b>Cost adjustments</b>	<b>Commission adjustment</b>	<b>Rationale for adjustment</b>
Shared facilities costs	Estimated shared facilities' costs by adjusting RCCI's cost model to reflect the capacity of the shared facilities and the units of shared facilities required for the monthly capacity rate per 100 Mbps service.	RCCI's proposed shared facilities' costs are calculated without consideration of capacity costing principles, i.e., without consideration to the total capacity of the equipment contained within the network and the resources required by the services.
Inter-city backhaul costs	Estimated inter-city backhaul capital cash flows based on the proxy of the other three <sup>13</sup> cable provider backhaul costs.	RCCI proposed to treat inter-city backhaul costs as an expense cash flow instead of a capital cash flow. The assets associated with these costs are capitalized facilities. Additionally, these cash flows are subject to an annual unit cost change assumption of minus 26.4%. The Commission adopted the average of the other three cable companies as a proxy since RCCI's expense cash flows could not be modified as filed.

<sup>13</sup> Cogeco, Shaw, and Videotron

Aggregated wholesale HSA specific backhaul costs	Estimated aggregated wholesale HSA specific backhaul capital cash flows by applying the annual capital unit cost change assumption of minus 26.4% to RCCI's 2010 approved IFCs per Mbps.	RCCI's proposed costs are reflected in the cost study as expense cash flows instead of capital cash flows. The assets associated with these costs are capitalized facilities. Additionally, these cash flows are subject to an annual unit cost change assumption of minus 26.4%. The Commission adopted RCCI's 2010 approved IFCs per Mbps as a proxy since RCCI's expense cash flows could not be modified as filed.
Node segmentation, <sup>14</sup> router, and CMTS capital costs	Adjusted node segmentation, router, and CMTS capital costs to reflect the appropriate working fill factors.	RCCI provided no evidence to deviate from the determinations made in Telecom Decision 2006-77, and Appendix V, Table 9 of the Manual.
40% markup applied to costs	Revised markup to 30%.	RCCI has not provided any evidence to demonstrate that circumstances have changed since the Commission's determination in Telecom Decision 2013-77. <sup>15</sup>

### Shaw

Cost adjustments	Commission adjustment	Rationale for adjustment
CMTS or Converged Cable Access Platform (CCAP) <sup>16</sup>	Adjusted costs to reflect only growth technology (CCAP).	Shaw's proposed costs are calculated using existing deployed and growth technology instead of growth technology only.
Node segmentation capital costs	Adjusted node segmentation capital costs to reflect appropriate working fill factors.	Shaw provided no evidence to support deviation from the determinations made in Telecom Decision 2006-77.

<sup>14</sup> Node segmentation refers to the increased rollout of optical fibre nodes in the local network plant to permit splitting of coaxial cable segments and thus increasing the bandwidth available to customers.

<sup>15</sup> In paragraph 56 of Telecom Decision 2013-77, the Commission stated that "in Telecom Regulatory Policy 2011-703, the Commission denied the cable carriers' request for an additional 10 percent markup because: i) the cable carriers did not provide evidence to demonstrate that the wholesale speed matching requirement would increase the risk factors associated with their new infrastructure investments, ii) the cable carriers' cost of capital used to establish rates was higher than the ILECs [incumbent local exchange carriers], and iii) the approved rates appropriately recognized the cable carriers' risk. Further, in response to the cable carriers' request that, for symmetry, they be allowed to apply the same additional 10 percent markup, the Commission indicated that the cable carriers did not provide any evidence to demonstrate that circumstances had changed since Telecom Regulatory Policy 2010-632."

<sup>16</sup> CMTS and CCAP are equipment, typically located in a cable company's head-end, which are used to provide high-speed data services, such as cable Internet or voice over Internet Protocol, to end-users.

130 to 250 Mbps banded access service speed costs	Estimated the 130 to 250 Mbps speed band cost based on the appropriate weights of the access speeds in the band.	Shaw's proposed banded access service speed cost calculation did not follow the determinations made in Telecom Decision 2016-117.
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**TCC**

<b>Cost adjustments</b>	<b>Commission adjustment</b>	<b>Rationale for adjustment</b>
Annual unit cost change assumption of minus 26.4%	Applied annual unit cost change assumption of minus 26.4% to the applicable costs.	TCC did not follow the determinations made in Telecom Decision 2016-117.
Digital Subscriber Line Access Multiplexer (DSLAM) costs	Estimated DSLAM costs based on the approved DSLAM costs in Telecom Order 2014-537.	TCC's proposed DSLAM costs are significantly higher than the approved DSLAM costs in Telecom Order 2014-537. TCC provided insufficient evidence to support the increased costs.

**Videotron**

<b>Cost adjustments</b>	<b>Commission adjustment</b>	<b>Rationale for adjustment</b>
CMTS and Optical Node costs	Applied Videotron's unit costs developed and submitted in Table 6b – Capital Equipment of its application, rather than the unit cost estimates provided by a subject matter expert.	Videotron did not use the unit cost estimates developed in Table 6b, and relied on unit cost estimates provided by a subject matter expert for its cost study, with insufficient rationale.
CMTS costs	Applied annual unit cost change assumption of minus 26.4% to the 2015 CMTS unit costs to estimate the 2016 CMTS costs.	Videotron's proposed CMTS unit costs are based on 2015 dollars.