



Telecom Decision CRTC 2023-53

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Network configuration for disaggregated wholesale high-speed access services

Summary

The Commission finds that the disaggregated wholesale high-speed access (HSA) service framework has not fulfilled its mandate and requires reconsideration. The Commission determines that the network configuration for disaggregated wholesale HSA services will remain in Ontario and Quebec pursuant to existing tariffs and will not be introduced in other markets at this time.

The Commission's goal remains to establish a wholesale HSA service framework so that Canadian consumers benefit from a more competitive Internet service market. To that end, concurrent with this decision, the Commission is issuing Telecom Notice of Consultation 2023-56, which initiates a broader review of wholesale HSA services.

Background

1. In Telecom Regulatory Policy 2015-326, the Commission determined that it would continue to mandate the provision of wholesale high-speed access (HSA) services. The provision of aggregated wholesale HSA services would no longer be mandated and would be phased out in conjunction with the implementation and adoption of a new disaggregated wholesale HSA service model. As a result, the Commission directed Bell Canada, Cogeco Communications Inc. (Cogeco), Videotron Ltd. (Videotron), and Rogers Communications Canada Inc. (RCCI), in Ontario and Quebec, to provide a disaggregated wholesale HSA service. When implemented and adopted, the obligation to provide an aggregated wholesale HSA service (which includes both access and transport components) would be removed following a transition. The Commission began the process of implementing the new disaggregated wholesale HSA services with plans to later expand their availability into other parts of Canada.
2. The above-noted companies subsequently filed proposed configurations for disaggregated wholesale HSA services. The Commission reviewed these proposals and established guidelines for acceptable configurations in Telecom Decision 2016-379. This resulted in fully disaggregated wholesale HSA configurations being adopted where no transport was included in the service. The Commission further directed the companies to file proposed rates with associated cost studies for their

disaggregated wholesale HSA services that reflected the Commission's directives. In Telecom Orders 2017-312 and 2017-312-1, the Commission set interim rates, terms, and conditions for these services in Ontario and Quebec.

3. By letter dated 6 July 2018 (hereafter, the follow-up proceeding), the Commission requested that other wholesale HSA service providers, namely Bell MTS Inc.; Bragg Communications Incorporated, carrying on business as Eastlink (Eastlink); Saskatchewan Telecommunications (SaskTel); Shaw Cablesystems G.P. (Shaw); and TELUS Communications Inc. (TCI), submit proposed configurations, along with supporting rationale, for their disaggregated wholesale HSA services in their respective serving territories. Bell Canada and RCCI were also asked to submit proposed configurations for the services in their respective serving territories outside Ontario and Quebec. After the filing of proposed configurations and a subsequent request from the Canadian Network Operators Consortium, now Competitive Network Operators of Canada (CNOC), for further process, the Commission issued a letter, dated 24 October 2018, in which it noted that it was suspending the follow-up proceeding.
4. On 7 November 2018, CNOC filed a Part 1 application to review and vary Telecom Regulatory Policy 2015-326 and Telecom Decision 2016-379. In its application, CNOC raised a number of issues related to the implementation of the disaggregated wholesale HSA service framework, given that its implementation had not unfolded as anticipated. It requested, among other things, that the disaggregated wholesale HSA services of Bell Canada, and possibly those ofCogeco, RCCI, and Videotron, be subject to a significantly reduced level of disaggregation, thereby allowing for some transport elements to be included in the services. CNOC's application was closed upon publication of Telecom Notice of Consultation 2020-187, and the Commission indicated that the issue of access to fibre-to-the premises (FTTP) facilities via aggregated wholesale HSA services would be deferred to a future proceeding.

Telecom Notice of Consultation 2020-187

5. The Commission issued Telecom Notice of Consultation 2020-187 to facilitate the deployment of disaggregated wholesale HSA services by re-examining the configurations for the services. The Commission indicated that its transition plan, specifically related to the transition from aggregated to disaggregated wholesale HSA services established in Telecom Regulatory Policy 2015-326, may not be achieved without further measures. Moreover, by establishing configurations with the appropriate level of disaggregation for all wholesale HSA service providers in all regions across Canada, mandated access to FTTP would begin for all such providers. This would result in higher speeds being made available to competitors on both cable and incumbent local exchange carriers (ILEC) company networks.
6. In Telecom Notice of Consultation 2020-187, the Commission sought comments on whether the existing disaggregated wholesale HSA service framework supports an orderly, cost-effective transition from aggregated to disaggregated wholesale HSA services. Parties were requested to propose configurations for disaggregated

wholesale HSA services that included a reduced level of disaggregation (as opposed to full disaggregation) by considering several factors.

7. Several issues, however, were explicitly scoped out of the review. The Commission suspended the proceeding setting final rates, terms, and conditions for disaggregated wholesale HSA services in Ontario and Quebec. It also deferred consideration of issues such as whether to provide access to FTTP facilities over aggregated wholesale HSA services to a future proceeding.
8. The Commission received interventions from two individuals; Bell Canada, SaskTel, and TCI (collectively, the ILECs); Cogeco, Eastlink, RCCI, Shaw, and Videotron (collectively, the cable carriers); Allstream Business Inc. (Allstream); CNOC; the Community Fibre Company; Distributel Communications Limited (Distributel); TekSavvy Solutions Inc. (TekSavvy); Uniserve; and Vaxination Informatique; as well as from the British Columbia Broadband Association (BCBA); the Internet Society – Canada Chapter; and the Public Interest Advocacy Centre (PIAC).

Positions of parties

9. Many parties, including Allstream, Eastlink, PIAC, RCCI, Shaw, TekSavvy, and the ILECs, argued that it is premature to consider reconfiguring the disaggregated wholesale HSA services when the existing configurations have been subject to significant implementation delays and regulatory uncertainty. These parties suggested that the lack of demand for the service under the existing configurations is attributable to these factors rather than to the configurations of the services themselves.
10. Parties including Eastlink, RCCI, SaskTel, and TCI submitted that the Telecom Notice of Consultation 2020-187 process contradicts current Commission policy as set out in Telecom Regulatory Policy 2015-326, notably that transport services were previously found to be duplicable and therefore appropriately excluded from a mandated wholesale service given their non-essential nature. They argued that the Commission appropriately established a framework that strove to reduce competitor reliance on price regulation and to provide competitors with more control over their pricing structure. They generally argued that the Commission should not abandon this facilities-based approach to regulation that allows for more innovation and choice while driving competition and network investment.
11. Bell Canada, Cogeco, Eastlink, RCCI, and SaskTel submitted that fully disaggregated configurations remained appropriate and viable given that (i) they have been approved; (ii) competitors have gained market share over the years; (iii) costs have been incurred by Bell Canada, Cogeco, RCCI, and Videotron to deploy the existing configurations; and (iv) some Internet service providers (ISPs) have begun to transition from aggregated to disaggregated wholesale HSA services.
12. SaskTel and TCI submitted that the current disaggregated wholesale HSA framework has not been fairly tested and that the Commission should not apply such a

framework to other geographic markets in Canada until it is at least proven to be a success or failure in the original target markets in Ontario and Quebec.

13. TekSavvy submitted that disaggregated wholesale HSA services should be as disaggregated as feasible, which would allow competitors to manage and scale their usage-based costs as bandwidth requirements increase. It further argued that an intermediate aggregation level will not address all the issues surrounding the current disaggregated wholesale HSA service framework. For example, it noted that its own digital subscriber line (DSL) subscriber base has been steadily eroding for years due to the low speeds supported by the DSL-based aggregated wholesale HSA services and the poor business case associated with Bell Canada's disaggregated wholesale HSA services.
14. CNOc submitted that the existing disaggregated wholesale HSA service framework does not work. It argued that fully disaggregated configurations are not viable due to, among other things, the difficulties in obtaining reasonable terms and conditions at cost-based rates, and deployment timelines it considers to be excessively long on a province-wide basis in Ontario and Quebec. CNOc submitted that revised configurations with significantly reduced levels of disaggregation are essential to establishing a more orderly and efficient wholesale framework.
15. Several parties, including Allstream, the BCBA, the Community Fibre Company, Distributel, and Eastlink indicated that implementation costs associated with disaggregated wholesale HSA services are high, and that this limits competitors' ability to make use of the services, particularly outside high-density urban markets.
16. Parties including the BCBA, CNOc, Distributel, and PIAC indicated that transport functionality is generally not available at the vast majority of disaggregated points of interconnection (POIs), and suggested that transport cannot be practically or reasonably duplicated in many cases.
17. Many parties argued that a more comprehensive examination of the issues must be addressed in a broader wholesale wireline framework review prior to the Commission finalizing its approach to mandated wholesale HSA services.
18. With respect to proposals for reconfiguration, the ILECs, the cable carriers, and various other parties identified materially different potential network configurations or recommendations in their submissions. Approaches included (i) an addressable market metric of 30,000 homes passed per POI that was identified by Bell Canada, (ii) TCI's proposal to align configurations with its concept of Core Sites, (iii) Shaw's proposal to align configurations with the ongoing transition of its network to Distributed Access Architecture, and (iv) a proposal by Allstream, CNOc, and Distributel to base configurations on the access tandem template.
19. When exploring the viability of configurations using an addressable market of 30,000 homes passed per POI, some parties, including RCCI, did not submit proposals, while several of those that did, including Shaw and TCI, indicated that such an approach

would be inappropriate and would not align with existing or future network architecture and demographics. At the same time, parties such as CNOC and Distributel argued that an addressable market of 30,000 homes passed would not produce a viable business case, with Distributel arguing that the addressable market for each disaggregated POI should be greater than 200,000 homes passed.

Commission's analysis

20. The Commission notes that it had initiated this proceeding to address various parties' concerns, as well as its own, regarding the state of the regulatory framework for wholesale HSA services. In particular, the Commission did not have confirmation that there had been any implementation of disaggregated wholesale HSA services under the existing fully disaggregated configurations when it initiated the proceeding. The Commission therefore sought comments on whether disaggregated wholesale HSA service configurations should be subject to a reduced level of disaggregation to ensure that there is an efficient, orderly, and cost-effective transition from aggregated to disaggregated wholesale HSA services.
21. The Commission notes that through the course of the proceeding, wholesale HSA service providers did not agree on a common approach on viable configurations for disaggregated wholesale HSA services to support their adoption and, ultimately, the transition to a new wholesale HSA service framework. Similarly, competitors did not agree on a common approach regarding viable configurations.
22. Parties' proposals to reconfigure disaggregated wholesale HSA services varied widely, with wholesale HSA service providers supporting greater degrees of disaggregation than nearly all competitors, which generally proposed highly aggregated wholesale HSA services. The Commission considers that even among wholesale HSA service providers, there were significant variations in the level of proposed disaggregation. The Commission recognizes that variations in disaggregated HSA service configurations between ILECs and cable carriers are due to each of the provider's geographic market conditions within its operating territory and its unique network design and evolution. Further, incumbent carriers are continually evolving their networks in response to advancements in technology and changing market conditions.
23. Based on the record of this proceeding, the Commission considers that its current disaggregated wholesale HSA service framework and attempts to impose a reconfiguration are problematic and not delivering competitive benefits to Canadians quickly. The environment features networks that are too different, and changes in technology and consumer demand that are too rapid, for this approach to be effective.
24. In addition to the above, it is clear that, even if one of the various proposed reconfigurations were ultimately adopted, there is no guarantee that the business case for the services would be materially more viable than the existing fully disaggregated configurations that are already raising significant concern.

25. The Commission is of the view that disaggregated wholesale HSA services have a limited ability to support competition, regardless of the configuration. While there may be limited potential viability in certain markets, namely densely populated urban areas, there are broadly insufficient wholesale subscribers or economies of scale for competitors to risk the investment required to warrant migrating to disaggregated wholesale HSA services. Potential viability of these services is significantly reduced in less urban areas as well as in rural and remote areas across the country, since these markets would require a significant subscriber base to develop under the disaggregated model.
26. The Commission also considers that the availability of transport services plays an important role in the current and future viability of disaggregated wholesale HSA services. The Commission notes that several parties argued that such transport services are simply not practically available at many of the POIs established in the current configurations, including more densely populated urban markets. The Commission considers that if transport services are either not practically available on a wholesale basis, or cannot be reasonably duplicated by competitors, this would severely limit the viability of the Commission's broader wholesale HSA service framework.
27. Furthermore, the Commission considers that if the availability of competitive transport services is a concern in the context of densely populated urban markets, then such concerns resonate even stronger in less densely populated areas, including rural and remote areas. While the Commission recognizes that competitors' primary interest is generally in markets with a large population base, it is important that the benefits of competition be available to all Canadians, regardless of where they live. The Commission notes that concerns regarding the availability of competitive transport services had also been raised in the context of Telecom Notice of Consultation 2019-406, where this issue was identified as a barrier to the deployment of broadband networks. While this issue was not a focus of the current proceeding, the Commission considers that the broader issue of the availability of competitive transport services merits further process and consideration.
28. The Commission considers that the prolonged time period for which the rates have been left interim has not been conducive to proper business planning by all stakeholders. The Commission considers that without greater rate certainty, competitors have not been able to make business decisions to invest in disaggregated wholesale HSA services. In this regard, any reconfiguration of the existing services would require a reconsideration of the associated rates – a process which would undoubtedly take time and contribute to further uncertainty.
29. The Commission acknowledges that the implementation of its 2015 wholesale HSA service framework has been a lengthy process that has extended well beyond its expected completion date. The Commission considers that the process, which has been ongoing for more than seven years, has been prolonged at least in part as a result of the divergent and changing positions that have been adopted by parties. For example, in the proceeding that led to Telecom Regulatory Policy 2015-326, parties

adopted what it considers were polarized positions, where competitors sought access to both aggregated and disaggregated wholesale HSA services, while ILECs and cable carriers argued that no wholesale regulation was necessary to support consumer interests.

30. In the Commission's view, a degree of regulatory gaming has impaired progress and contributed to market uncertainty while simultaneously increasing the challenges associated with implementing a framework predicated on disaggregated wholesale HSA services.
31. In summary, the Commission considers that the complexity of reconfiguring disaggregated wholesale HSA services for providers with vastly different configuration profiles, network and evolution plans, geographic markets, and wholesale customer needs, as well as the challenges associated with rate setting, potential issues around access to transport service, and a degree of ongoing regulatory gaming among parties, have effectively forestalled any further implementation of disaggregated wholesale HSA services. In the circumstances, the Commission considers that the future demand for the currently mandated disaggregated wholesale services will continue to be limited.
32. For these reasons, the Commission considers that the disaggregated wholesale HSA service framework has not fulfilled its mandate and requires a reconsideration. While there may still be merit in certain large competitors adopting disaggregated wholesale HSA services in a limited number of densely populated urban areas with favourable market conditions, the Commission considers that the implementation of the services and the associated transition plan does not support competition in many parts of Canada, particularly rural and remote areas, or areas where competition comes from smaller competitors. The Commission therefore considers that the framework and transition plan did not adequately support competitive growth and were not adjusted in time to respond to the changing environment.
33. Under such circumstances, it is the Commission's view that it would not be appropriate to invest further time and resources in attempting to refine, give more time to develop, or expand the disaggregated wholesale HSA service framework. In the Commission's view, regardless of how the services are configured, the market potential for disaggregated wholesale HSA services will remain low and, therefore, the services will not be a viable option to broadly support the competition required to respond to the needs of Canadians.

Conclusion

34. In light of all of the above, the Commission determines that it will not introduce disaggregated wholesale HSA services in Ontario and Quebec with a reduced level of disaggregation and that such services will not be implemented outside those provinces in the foreseeable future. Competitors in Ontario and Quebec who wish to avail themselves of disaggregated wholesale HSA services may continue to do so pursuant to the existing interim rates, terms, and conditions.

35. The Commission's goal remains to establish a wholesale HSA service framework so that Canadian consumers benefit from a more competitive Internet service market. To that end, concurrent with this decision, the Commission is issuing Telecom Notice of Consultation 2023-56, to initiate a broader review of wholesale HSA services. This review will further consider the future of disaggregated wholesale HSA services, including a means to make the above-noted rates, terms, and conditions final.

2023 Policy Direction

36. The Commission considers that continuing down the path of attempting to refine the disaggregated wholesale HSA service framework through introducing reconfigurations in Ontario and Quebec and introducing disaggregated wholesale HSA services outside these provinces would not fulfill the principle of effective regulation as set out in section 4 of the 2023 Policy Direction,¹ which specifies that the Commission should ensure that the measures it imposes through its decisions are efficient and proportionate to their purpose. Regardless of how disaggregated wholesale HSA services are configured, the Commission considers that its market potential will remain low. Therefore, the services will not be a viable option to broadly support the competition required to respond to the needs of Canadians.
37. The Commission considers that the competitive dynamics in the retail Internet service market are best addressed by initiating a proceeding to review its wholesale HSA service framework, since such access would better promote the realization of the objectives set out in section 2 of the 2023 Policy Direction, namely the following:
- encouraging all forms of competition and investment [subsection 2(a)];
 - fostering affordability and lower prices [subsection 2(b)];
 - ensuring affordable access to high-quality telecommunications services is made available throughout Canada [subsection 2(c)];
 - reducing barriers to entry in the market [subsection 2(e)]; and
 - enabling innovation in telecommunications services, including differentiated service offerings [subsection 2(f)].
38. The Commission also considers that initiating such a proceeding is consistent with subsection 9(c) of the 2023 Policy Direction, which requires that the Commission adjust its framework for fostering fixed Internet competition as necessary and in a timely manner.

¹ *Order Issuing a Direction to the CRTC on a Renewed Approach to Telecommunications Policy*, SOR/2023-23, 10 February 2023

Secretary General

Related documents

- *Notice of hearing – Review of the wholesale high-speed access service framework*, Telecom Notice of Consultation CRTC 2023-56, 8 March 2023
- *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 regarding barriers to the deployment of broadband-capable networks in underserved areas in Canada*, Telecom Notice of Consultation CRTC 2019-406, 10 December 2019; as amended by Telecom Notice of Consultation CRTC 2019-406-1, 20 December 2019; and 2019-406-2, 21 April 2020
- *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 2017-312-1, 12 September 2017
- *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 wholesale wireline services and associated policies*, Telecom Regulatory Policy CRTC 2015-326, 22 July 2015