

Telecom Notice of Consultation 2017-49

Review of the competitor quality of service regime

Joint Final Reply Comments of

**Bragg Communications Inc., operating as Eastlink, Cogeco
Communications Inc., on behalf of its affiliate Cogeco
Connexion Inc., Quebecor Media Inc., on behalf of its affiliate
Videotron G.P., Rogers Communications Canada Inc., and
Shaw Cablesystems G.P.
(collectively, the Cable Carriers)**

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Executive Summary

- ES1. Bragg Communications Inc., operating as Eastlink (“Eastlink”), Cogeco Communications Inc., on behalf of its affiliate Cogeco Connexion Inc. (“Cogeco”), Quebecor Media Inc., on behalf of its affiliate Videotron G.P. (“Videotron”), Rogers Communications Canada Inc. (“Rogers”), and Shaw Cablesystems G.P. (“Shaw”) (collectively, the “Cable Carriers”) provide the following joint final reply comments on the issues raised in Telecom Notice of Consultation 2017-49, *Review of the competitor quality of service regime* (TNC 2017-49).
- ES2. TNC 2017-49 initiated a review of the Competitor Quality of Service (“C Q of S”) regime, which currently applies to certain of the regulated wholesale services of the incumbent local exchange carriers (“ILECs”). A Rate Rebate Plan (“RRP”) is also part of the current C Q of S regime.
- ES3. The review of the C Q of S regime initiated by TNC 2017-49 is considering whether C Q of S should continue to apply to the current set of regulated wholesale services used by competitors in the wireline voice telephony market. In addition, the review is examining whether a C Q of S regime is warranted for other regulated wholesale services, notably in the high-speed Internet and mobile wireless markets.
- ES4. The Cable Carriers’ April 24, 2017 joint comments set out five criteria for assessing whether a C Q of S regime should be imposed on regulated wholesale services. These criteria are: (1) whether the market is sufficiently competitive; (2) whether there is evidence of service quality repeat failures; (3) whether the wholesale service providers control quality factors; (4) whether wholesale service quality is inferior to retail; and (5) whether a cost-benefit analysis justifies a C Q of S regime, assuming the other four criteria are met.
- ES5. The Cable Carriers remain of the view that no C Q of S regime is justified for wholesale services in the markets for wireline voice telephony, high-speed Internet or mobile wireless services as none of these markets satisfy the five criteria. Accordingly, the Commission should reject calls to maintain or expand the C Q of S regime for regulated wholesale services. Parties that have called for extensive C Q of S obligations have not justified such regulation. Rather, they seek to impose the additional regulatory burden of a C Q of S regime based on unproven and anecdotal evidence, and “just in case” service quality may deteriorate in the future.

Wholesale services in the high-speed Internet market

- ES6. Wholesale high-speed access (“WHSA”) services that are used primarily in the retail high-speed Internet market have been the main focus of submissions in this proceeding. The providers of WHSA services have amply demonstrated why it is unnecessary to

establish a C Q of S regime for mandated WHSA services, based on the five criteria in the Cable Carriers' joint comments. In contrast, those parties seeking such regulatory obligations propose criteria that would capture essentially all regulated wholesale services without any regard to whether quality of service has fallen, or is likely to fall, below acceptable standards.

- ES7. The first criterion the Commission should consider is whether there are insufficient competitive market forces to incent wholesale service providers to maintain a reasonable quality of service. The Cable Carriers' WHSA service, known as Third Party Internet Access ("TPIA") has been provided with sufficient quality for independent Internet service providers ("IISPs") to increase their share of the retail market. IISPs have nearly doubled their share of the residential retail market for high-speed Internet services and the number of cable-enabled WHSA access lines has more than doubled each and every year from 2010 to 2015. The growth in WHSA services overall, and particularly for cable-enabled services, is evidence of increasing competition for these wholesale services. Parties seeking a C Q of S regime for WHSA services failed to refute these growth figures.
- ES8. Therefore, the first criterion is not met, the market is competitive and there is no reason to proceed through the remaining criteria. However, for completeness, the Cable Carriers provide evidence for each one.
- ES9. The second criterion is not met because there is no evidence of repeat failures in service quality of WHSA services. Cable Carriers have received few complaints from TPIA service customers regarding service quality. The Cable Carriers have investigated the carrier-specific complaints raised by CNOC and Teksavvy in their responses to requests for information in this proceeding and have provided their responses to these matters under separate cover. These responses demonstrate that there is no evidence that the complaints are attributable to repeated failures by the Cable Carriers to meet a reasonable standard of quality for those service elements that are within their control.
- ES10. The third criterion is not met because delivery of the WHSA services of the Cable Carriers depends on actions by the IISPs. WHSA services are used by IISPs to provision retail services in conjunction with the IISPs' services and other third-party inputs, such as customer premise equipment and facilities. In addition, it is the IISPs' responsibility to work with their end-users to arrange service installation and repairs. These other inputs and procedures have the potential to impact service quality received by the IISPs' end-users in ways that are beyond the control of the Cable Carriers. It would be very difficult to design a C Q of S regime that would exclude those aspects of WHSA service delivery that are not fully within the control of the Cable Carriers. In addition, CNOC's proposal to allow IISPs to overrule exclusions in circumstances where service quality failure is beyond the control of the Cable Carriers creates incentives for the IISPs to game the system. It would result in biased and unreliable Q of S indicators and would be punitive to the wholesale service providers.

- ES11. The Commission should not adopt service indicators that would rely on measuring service intervals. The record of the proceeding demonstrates the impediments to measuring the start and end points of intervals on a consistent and unbiased basis, accounting for differences in procedural steps for wholesale and retail services, and excluding from the intervals for WHSA the various factors that are beyond the control of the wholesale service providers. Indicators based on service intervals would not provide reliable and consistent measures of service quality.
- ES12. The fourth criterion is not met in light of the evidence that the quality of TPIA services provided by the Cable Carriers is equal to, or in some cases, better than provided to their own retail high-speed Internet services. This is consistent with the fact that TPIA services are provided over shared network infrastructure and many of the same operational systems are used to support both wholesale and retail services. The Cable Carriers process TPIA service requests using the same appointment scheduling systems and technicians, once the order has been vetted by the Carrier Services Group (“CSG”).
- ES13. The fifth and final criterion is not met because the costs of a C Q of S regime for WHSA services would far outweigh any potential or perceived benefits. The service indicators themselves would need to be defined, including specific factors to include and exclude in the measurement. Each WHSA service provider would need to develop systems and procedures to collect and report on service indicators, in place of the manual methods used to extract many of indicators of service quality produced for this proceeding.
- ES14. In addition, the responses to requests for information demonstrate that the WHSA service providers differ greatly, not only in serving technologies, but also operational systems and procedures for provisioning WHSA services. A C Q of S regime that sought to overcome these differences would require system changes and additional resources to support TPIA services. These costs would be in addition to the process-related costs that would be incurred to develop, implement and maintain a C Q of S regime.
- ES15. The substantial costs and resources required to develop, implement and maintain a C Q of S regime would divert resources away from TPIA service, including resources currently deployed by the Cable Carriers to improve service delivery.
- ES16. The Commission should reject proposals to establish a C Q of S regime “just in case” service quality might deteriorate in the future. Such regulatory intervention would be contrary to the Policy Direction that regulation be imposed only where necessary and in an efficient and proportionate manner.
- ES17. The Commission should reject CNOG’s proposed C Q of S regime. The proposal is flawed and inconsistent with the Policy Direction that regulation be imposed only where necessary and only in an efficient and proportionate manner. The proposed C Q of S regime is not justified for WHSA services. It would be very costly and administratively burdensome to implement and maintain, and contemplates several flawed, duplicative and punitive measures.

- ES18. The Cable Carriers have worked with TPIA customers to resolve concerns with service quality and improve service provisioning. Bilateral and multilateral negotiations among industry participants have proven to be an effective means for resolving concerns of TPIA customers and have resulted in improvements in service delivery. The numerous service improvements are listed in Appendix A.
- ES19. In addition to negotiations, there are other tools available to assist parties in the resolution of service quality concerns. These include Commission-supervised dispute resolution mechanisms or reports of complaints to the wholesale service provider and, where necessary, to the Commission. These alternative mechanisms could resolve issues in a more cost-effective and timely manner, compared to a C Q of S regime that has been shown to require substantial time and resources to develop and maintain.
- ES20. The Commission should endorse the ongoing efforts of industry stakeholders to work collaboratively in ensuring high quality service that benefits all consumers, and not risk disrupting the progress by mandating a C Q of S regime.
- ES21. However, in the event that the Commission considers it necessary to impose a C Q of S regime for WHSA services, it should limit the service indicators to those that could measure service quality on a reliable and consistent basis and in a manner that can reasonably be compared between wholesale and comparable retail services. Examples of service indicators that may satisfy these requirements are the percentage of competitor installation appointments met and the percentage of repair appointments met, measured on a company-wide basis.

Wholesale services in the wireline voice telephony market

- ES22. The Cable Carriers remain of the view that the Commission should phase out the C Q of S regime as it currently applies to the ILECs' regulated wholesale services in the wireline voice telephony market. There is no evidence on the record of the proceeding to maintain these regulations.

Wholesale services in the mobile wireless market

- ES23. The Cable Carriers do not consider it necessary to expand the C Q of S regime to wholesale mobile wireless roaming services. Nothing on the record of this proceeding demonstrates that a C Q of S regime is necessary. Customers of these wholesale services have not requested that a C Q of S regime be established.

1.0 Introduction

1. Bragg Communications Inc., operating as Eastlink (“Eastlink”), Cogeco Communications Inc., on behalf of its affiliate Cogeco Connexion Inc. (“Cogeco”), Quebecor Media Inc., on behalf of its affiliate Videotron G.P. (“Videotron”), Rogers Communications Canada Inc. (“Rogers”), and Shaw Cablesystems G.P. (“Shaw”) (collectively, the “Cable Carriers”) provide the following joint final reply comments on the issues raised in Telecom Notice of Consultation 2017-49, *Review of the competitor quality of service regime* (TNC 2017-49). In addition, Cogeco, Eastlink, Videotron, Rogers and Shaw are filing supplemental final reply comments in response to matters raised by parties in this proceeding that are specific to each of their operations.
2. TNC 2017-49 initiated a review of the Competitor Quality of Service (“C Q of S”) regime, which currently applies to certain of the regulated wholesale services of the incumbent local exchange carriers (“ILECs”). A Rate Rebate Plan (“RRP”) is also part of the current C Q of S regime. The purpose of the review is to determine whether the existing regime should be maintained, and if so in what form, or phased out. In addition, the review will consider whether any C Q of S regime is warranted for other regulated wholesale services, and if so, in what form.
3. The Cable Carriers remain of the view that the C Q of S regime is not warranted for any regulated wholesale service. The existing regime should be phased out for the ILECs’ wholesale services in the retail wireline voice telephony market and not introduced for Wholesale High-Speed Access (“WHSA”) services or wholesale mobile wireless roaming services. None of the interveners submitted compelling reasons to justify maintaining the existing obligations or extending these to other regulated wholesale services.
4. While the scope of wholesale services included in the review of the C Q of S regime encompasses those services currently subject to C Q of S regime and other regulated services, the submissions of parties in this proceeding have largely been directed at WHSA. Accordingly, the Cable Carriers’ joint final reply comments address the arguments raised respecting a C Q of S regime for WHSA services, and rely on their joint comments of April 24, 2017 with respect to other regulated wholesale services. The Cable Carriers’ WHSA service is also referred to by its tariffed name, Third Party Internet Access (“TPIA”).
5. The Cable Carriers submit that the question of whether to impose a C Q of S regime on WHSA services should be assessed based on the analytical framework of five criteria, as described in their joint comments of April 24, 2017.¹ The five criteria are: (1) whether the market is sufficiently competitive; (2) whether there is evidence of service quality repeat failures; (3) whether the wholesale service providers control quality factors; (4) whether wholesale service quality is inferior to retail; and (5) whether a cost-benefit analysis justifies a C Q of S regime, assuming the other four criteria are met. These are addressed in sections 2 through 6, respectively, in the joint final reply comments. Section 7 provides the

¹ Cable Carriers, joint comments, TNC 2017-49, paragraph 160.

Cable Carriers' reply to other proposals and arguments raised by supporters of an extensive C Q of S regime. Section 8 provides the Cable Carriers' views on alternatives to a C Q of S regime.

2.0 Competitiveness of the Market

6. The first of the five criteria for assessing whether a C Q of S regime may be warranted is whether there are insufficient competitive market forces to incent wholesale service providers to maintain a reasonable quality of service. This criterion should be applied as a first screen that would exclude from consideration those regulated wholesale services that are facing competitive market forces, either currently or are likely to do so in the near future.
7. The Cable Carriers' initial joint comments provided substantial evidence that the WHSA services market is competitive. IISPs have nearly doubled their share of the residential retail market for high-speed Internet services and the number of cable-enabled WHSA access lines has more than doubled each and every year from 2010 to 2015.²
8. Competition in the WHSA services market is further evidenced by the growth in the number of WHSA negotiated agreements that provide IISPs more attractive terms than regulated tariffs. The number of such agreements increased from 10 in 2014 to 22 in 2016.³ TELUS stated that nearly two-thirds of the end-users of IISPs using its WHSA services are served under terms of an off-tariff agreement.⁴
9. Another indication of the competitiveness of the WHSA services market is the extent to which the Cable Carriers' TPIA service has been improved. Service improvements include enhancements in network safeguards and support systems in the event of a network outage, procedures for TPIA connection tags at the customer premise, and reports on IP address allocation and utilization. Web portals for WHSA service have also been improved to enable wholesale customers to more effectively and efficiently submit and manage service requests. Further improvements to TPIA service are detailed in Appendix A.
10. Those parties that argued in support of a C Q of S regime for WHSA have failed to demonstrate the lack of competition. CNOC stated that "On the wholesale HSA service side, competitors face an omnipresent risk of delays relating to service order activations, installations, repairs and disconnections."⁵ The only evidence CNOC presented was in reference to service quality issues in another country (United Kingdom) with another wholesale service provider (Openreach) providing a different suite of wholesale services.⁶ The so-called "risk" of potential service quality problems with WHSA services in the future

² Cable Carriers, joint comments, TNC 2017-49, Charts 3.2 and 3.3.

³ Ibid., paragraph 23.

⁴ TELUS(Teksavvy)24May17-1.

⁵ CNOC, initial comments, TNC 2017-49, paragraph 24.

⁶ Ibid., paragraphs 25 and 26.

does not constitute evidence of a lack of competitive market forces in Canada. And there is no insight to be gained from the experience from another country where wholesale service providers are subject to different regulatory obligations that reflect different market conditions. References by CNOC and other parties to market conditions and regulations in other jurisdictions have no bearing on an assessment of market conditions within the Commission's jurisdiction.⁷

11. CNOC and Teksavvy sought to downplay the evidence of competitiveness of the market in claiming that there are significant barriers to switching between WHSA service providers.⁸ These claims are contradicted by the facts on the ground. Many IISPs have already established themselves as wholesale customers of both the cable and ILEC WHSA services. The costs of switching did not prevent these IISPs from doing so and present no barriers to switching going forward. This is further evidenced from the rapid growth in cable-enabled WHSA access lines, as well as publicly available marketing materials of the IISPs.
12. IISPs have been able to rely on the presence on both cable and telco WHSA platforms to their advantage in negotiations of off-tariff agreements, as evidenced in the following responses to requests for information filed by Videotron and Bell Canada.

“D'ailleurs, nous avons constaté au cours des dernières années que les FSI indépendants ne se gênent pas de mentionner le transfert possible de leurs utilisateurs finals à un fournisseur sous-jacent alternatif lorsqu'il s'agit de négociation d'ententes hors tarif.”⁹

“Customers who "leave us" do not terminate their relationship with us, which would require them to migrate their existing end-user base being served by our facilities to the facilities of another wholesale provider (i.e., cable). Instead, when an Internet Service Provider (ISP) determines that a more attractive wholesale service can be obtained from our competitors, the ISP will direct most, if not all, of its new end-user activations (and sometimes its speed upgrades of its existing end-users who are already on our network) to our cable competitors. We therefore compete aggressively with other wholesale service providers to incent new and existing wholesale customers to (or continue to) "load" end-users on our network as opposed to those of our competitors. By offering promotions to our wholesale customers, we are able to maintain and/or increase the percentage of new subscribers that our wholesale customers serve using our facilities. Without promotions, we lose this business to competing wholesale providers.”¹⁰

13. The Cable Carriers have provided evidence of the competitive nature of the WHSA services market and shown that market forces continue to be sufficient to ensure IISPs receive

⁷ See also Teksavvy, initial comments, TNC 2017-49, paragraph 12; PIAC, initial comments, TNC 2017-49, paragraphs 37 and 38; and OpenMedia, initial comments, TNC 2017-49, paragraphs 65 and 66.

⁸ CNOC(CRTC)24May17-3, and Teksavvy(CRTC)24May17-2.

⁹ Québecor Média(OpenMedia)24May17-1.

¹⁰ Bell Canada(OpenMedia)24May17-3.

reasonable service quality. There is no justification for layering on new regulations in the form of a C Q of S regime. WHSA services do not satisfy the first criterion, thus under the analytical framework, it is not strictly necessary to consider the remaining four criteria. However, the following sections do so for completeness and as further evidence against imposing a C Q of S regime on WHSA services.

3.0 Service Quality Repeat Failures

14. The second criterion for assessing whether to impose a C Q of S regime is whether there is evidence of repeated failures in service quality for regulated wholesale services.
15. The Cable Carriers have received few complaints from TPIA service customers regarding service quality. Investigations of past complaints found no evidence that these complaints were attributable to repeated failures by the Cable Carriers to meet a reasonable standard of quality for those service elements that are within their control. The Commission's review did not find any evidence of discriminatory behaviour in the Cable Carriers' treatment of IISPs.¹¹
16. Some parties to this proceeding relied on these past complaints as evidence of poor service quality.¹² However, they did not present new evidence that would support revisiting these unfounded complaints.
17. CNOC and Teksavvy filed additional carrier-specific statistics related to the quality of WHSA services.¹³ The Cable Carriers have undertaken to investigate the information with respect to their TPIA services. The results of these investigations are provided under separate cover in the Cable Carriers' individual final reply comments. In summary, the investigations did not reveal any cases of repeat failures in the service quality of WHSA services provided by the Cable Carriers.
18. OpenMedia claimed to have evidence of poor quality of WHSA services, supported by details presented in Appendices A and B of its initial comments of April 24, 2017. Appendix A had a total of 40 entries and Appendix B had 9 entries. Of the 49 total entries, eight raised concerns about an installation of service using a cable-based WHSA service, and one related to a technical problem with both cable- and telco-based WHSA services. The information provided did not indicate whether the incidents occurred recently or years ago. The Cable Carriers are not able to investigate these complaints without additional information.

¹¹ Telecom Decision 2015-40, paragraph 17.

¹² PIAC, initial comments, TNC 2017-49, paragraph 26; Teksavvy, initial comments, TNC 2017-49, paragraph 14; CNOC(Cable Carriers)24May17-2.

¹³ CNOC(CRTC)24May17-1 and Teksavvy(CRTC)24May17-1. Carrier-specific information was filed in confidence with the Commission and provided to the respective carriers, subject to an agreement to maintain the confidentiality of the information in question.

19. Notwithstanding an active campaign to solicit complaints from end-users, OpenMedia presented fewer than ten complaints specific to the service quality of cable-based WHSA services, compared to more than half a million cable-based WHSA connections.¹⁴ OpenMedia's submission does not constitute evidence that the quality of cable-based WHSA services is prone to repeat failures. Accordingly, it should not be relied upon by the Commission as justification for a C Q of S regime for WHSA services.

4.0 Wholesale Service Providers' Control of Quality Factors

20. The third criterion is whether the repeated failures in quality of service are due to factors within the control of the wholesale service provider. The assessment of this criterion is not strictly necessary given that the assessment of WHSA services against the first two criteria demonstrates that a C Q of S regime is not warranted. However, the following describes the numerous ways in which the provisioning of WHSA services could be impacted by factors beyond the Cable Carriers' control.
21. It is very important that any measure of service quality of WHSA service properly takes account of, and excludes, factors that are not under the control of the wholesale service provider. To do otherwise would be punitive to the wholesale service providers and could increase the cost of providing wholesale services. It has been the Commission's practice in the past to limit the scope of quality of service indicators to activities under the control of wholesale service providers.
22. There are several steps involved in the provision of TPIA service that are beyond the control of the Cable Carriers and must not be counted against them when measuring service quality. This is particularly true for measures of service quality based on service intervals. The Cable Carriers strongly oppose service indicators that rely on service intervals to establish the standards. The concerns include the factors beyond their control, the problems with consistently measuring the start and end point of intervals and the potential for disputes with measuring intervals, which can lengthen the intervals and result in biased perceptions of service quality.

4.1 Processing cable-based WHSA service orders and trouble tickets

23. The CRTC Interconnection Steering Committee ("CISC") 1540 Ad Hoc Working Group has largely completed an updated TPIA End User Service Order and Trouble Ticket Guidelines ("TPIA Guidelines").¹⁵ The TPIA Guidelines describe the procedural steps for the Cable Carriers and IISPs for processing WHSA service orders and trouble tickets.

¹⁴ Cable Carriers, joint comments, TNC 2017-49, Chart 3.3 indicates the number of WHSA connections. Eastlink did not participate in the CISC 1540 Working Group, established pursuant to Telecom Decision 2015-40, as Eastlink was not a party to the proceeding leading up to that decision.

24. IISPs provide end-user service order information to the Cable Carriers' Carrier Services Groups ("CSGs") using a web portal or other electronic business interface. CSGs are a competitive safeguard that protect the IISPs' customer information from reaching the retail arms of the Cable Carriers. IISPs control the end-user relationship and are critical to ensuring information regarding service installation orders and technical problems are communicated to the WHSA service providers accurately and with completeness.
25. The CSG staff process IISPs' orders and trouble tickets according to established turn around periods, as described in the TPIA Guidelines. Service orders for installation of a new service are confirmed within two business days of receipt from the IISP, or rejected if information is inaccurate or incomplete. Rejected service orders can result in delays in confirming and completing a service order, which in turn, can contribute to longer service intervals.
26. Installations are scheduled beginning five business days from when the order is received. The Cable Carriers and IISPs agreed to the five-day interval to allow for proper coordination of the ordering and installation process. Trouble tickets initiated for technical problems are responded to by CSG staff within 24 hours. Once a service order is confirmed, or a trouble ticket opened, the matter is handled using the same systems for order completion, technician support or premise visit that are used to process the Cable Carriers' retail high-speed Internet services.
27. The individual Cable Carriers provided further details on their procedures in the responses to requests for information ___(CRTC)24May17-A1.

4.2 Factors affecting scheduling of technician appointments

28. There are a number of factors that can affect the scheduling of technician appointments. An order for installation for WHSA service requires a technician visit to the end-user premise in most cases, and always when installing service at a location where there is no active retail or TPIA cable modem connected to the Cable Carrier's facilities. Technician visits may also be required to resolve a trouble ticket. A technician dispatch generally requires someone at the end-user's premise to be present. Technician appointments for WHSA and retail high-speed Internet services are arranged using the same scheduling system.
29. The Cable Carrier will schedule the appointment for the technician visit according to the end-user's preferred appointment window, as conveyed by the IISP's service order, provided that a technician is available.¹⁶ If the end-user's requested appointment window is not available, the Cable Carrier will schedule the technician visit to occur at the closest available appointment window.

¹⁶ Cable Carriers allow an IISP to propose up to three appointment date/time slots preferred by the end-user when placing a service order. See the responses to Bragg(CRTC)24May17-A1, Québecor Média(CRTC)24May17-A1, Rogers(CRTC)24May17-A1, and Shaw(CRTC)24May17-A1.

30. The IISP may submit a reschedule request for a new installation date if the end-user does not accept the one provided by the Cable Carrier. An end-user may be limited in the days or time of day when she or he can be available for an appointment. A reschedule request is processed under the same service order, on an expedited basis. This additional step can lengthen the time before the technician visit can occur. Similar scheduling conflicts can arise when arranging a technician visit for a trouble ticket.
31. The appointment windows available in the near-term may be more limited when demand for technician visits is higher than normal. This can occur for seasonal or other reasons beyond the control of the wholesale service provider.
32. An end-user may request an appointment window that is several days, or weeks, in advance when ordering a service installation. For example, the installation may be requested for a date that corresponds to a change in residence. Some IISPs may accept requests for installations up to 30 days in advance.¹⁷ Such requests will lengthen the interval of time between when the service is ordered and installation is complete.
33. An IISP may submit multiple service orders in a batch that includes some requests for immediate service installations alongside requests for future service installations. All service order requests in the batch will be processed by the CSG on a first-come, first-served basis. This would result in certain service intervals being longer than if the IISP submitted individual service orders closer to the installation date requested by the end-user.
34. Longer service intervals will occur when the technician encounters “Nobody Home” at the scheduled appointment. Videotron identified this as the primary reason why trouble tickets were not resolved as scheduled.¹⁸ The appointment must be re-scheduled when the technician cannot complete the service order due to “Nobody Home”, which requires further communication between the IISP, its end-user and the Cable Carrier’s CSG.
35. The factors that affect scheduling of technician appointments to support the provisioning of WHSA services do not have the same impact on scheduling technician appointments for the Cable Carriers’ retail high-speed Internet service. This is because the Cable Carriers are able to interact directly with the end-user, rather than via their CSGs and the end-user’s IISP. The addition of an intermediary requires additional steps and introduces factors that can delay service delivery for reasons not under the Cable Carriers’ control.

4.3 Measuring service intervals

36. Most of the Cable Carriers do not track service interval metrics for operational reasons.¹⁹ A requirement to measure service indicators that rely on service intervals would require these wholesale service providers to create new systems and procedures to compile such statistics. Among the wholesale service providers that were able to provide statistics on

¹⁷ Teksavvy(CRTC)24May17-1.

¹⁸ Québecor Média(CNOC)24May17-1.

¹⁹ Rogers(CRTC)24May17-A1; Shaw(CRTC)24May17-A4, A5; and Québecor Média(CRTC)24May17-A1.

service intervals in this proceeding, it is apparent that there are several differences in how these intervals are measured. Wholesale customers do not measure service intervals in the same way, either in comparison to the wholesale service providers or among themselves.²⁰

37. The differences and gaps in service interval metrics could not be overcome without fundamental and costly changes to wholesale service providers' provisioning systems. IISPs and their end-users would likely not benefit from such changes. As noted by Shaw, "Establishing an arbitrary interval standard for TPIA installation and repair appointments would not reflect the realities of Shaw's business or customer needs."²¹
38. IISPs have the ability to start measuring the service order interval as soon as they receive a service order from the end-user or a technical problem is reported to them. Alternatively, IISPs may start the clock at the time an order or trouble ticket is submitted to the WHSA service provider's CSG. This would start the interval before confirmation from the CSG that the service can be provisioned by the wholesale service provider at the specified location and ensure the order is accurate and complete. Measuring a service interval on this basis would fail to exclude rejected service orders. In the case of a trouble ticket, the service interval could capture the time required by the IISP to conduct its own diagnostic tests, which could find the technical problem resided within its own services or equipment.
39. A service order interval should begin when the wholesale service provider has confirmed the order with the IISP, and assigned a confirmed appointment window (where needed). The interval should end on the date the Cable Carrier notifies the TPIA customer that the installation is complete, or that a reschedule is required when the technician could not complete the installation. As noted previously, rescheduling is frequently required because the technician found "Nobody Home" at the scheduled appointment window. The service interval will lengthen if the reschedule is associated with the same service order, rather than initiating a new service order.
40. The Cable Carriers have different procedures and timeframes for informing IISPs when service orders are completed or need to be rescheduled. This was discussed by participants to the CISC 1540 working group and is reflected in the non-consensus report accompanying the TPIA Guidelines that the industry participants intend to file shortly with the Commission. It must be noted that the CISC 1540 working group reached consensus on eight of nine issues addressed in the forthcoming report, which speaks to the willingness of the participants to find efficient and workable solutions.
41. Measuring service intervals for handling trouble tickets involve similar issues. Measuring the interval for technical problems should start on the date the Cable Carrier opens a trouble ticket. This requires the IISP to provide sufficient details to the TPIA CSG to investigate the problem, or the request will be rejected. The interval should end on the date the Cable Carrier notifies the TPIA customer that it has closed the trouble ticket because it has been

²⁰ CNOC(CRTC)24May17-2.

²¹ Shaw(CRTC)24May17-A1 c).

resolved. Section 8 of the TPIA Guidelines provides further information on the procedural steps handling trouble tickets.

42. It is important to note that the measured length of service intervals for trouble tickets will be affected by how wholesale service providers classify trouble tickets as “closed” or “resolved”. For example, wholesale service providers typically close a trouble ticket if they determine that the source of the trouble is not associated with their network facilities. If the IISP requests further troubleshooting for same service issue, a wholesale service provider may initiate a new trouble ticket, thus starting a new service interval, or the same trouble ticket could be re-opened. The service interval for handling trouble tickets could be vastly different based on these scenarios. Service intervals could be longer when an IISP needs time to provide the wholesale service provider with additional information in order to complete a service order request, reschedule a technician appointment or provide diagnostic details to troubleshoot a technical problem. The time required by the IISP for such tasks is beyond the control of the wholesale service provider and should not count against it when measuring the length of the service interval. However, it would be very difficult to manage a process that involved “pausing” the clock for a service interval while waiting for the IISP to respond. IISPs could also seek to dispute any such “pauses” in the clock, which would further complicate the process.
43. Relying on service intervals as indicators of service quality could be further complicated by disputes over whether a specific interval should be excluded from the indicator when it is missed for reasons not attributable to the WWSA service provider. IISPs may not agree that an interval was missed due to actions of the IISPs or their end-users. Most of the service indicators proposed by CNOC would permit exclusions under such circumstances, provided the IISP did not dispute that it or its customer was at fault.²²
44. CNOC’s proposal gives IISPs full control over whether to dispute exclusions, and thus determine whether these should be counted as service intervals or appointments missed by the wholesale service provider. IISPs would have an incentive to dispute exclusions since doing so is more likely to provide it with compensation under CNOC’s proposed Rate Rebate Plan. The incentive would be even greater if the dispute could trigger additional compensation under CNOC’s proposed repeat failure mechanism. This aspect of CNOC’s proposal for service indicators would increase the complexity and contentiousness of a C Q of S regime. It would also violate one of the Commission’s principles for a RRP that it not be punitive to the wholesale service provider.²³ The Cable Carriers strongly oppose CNOC’s proposal for IISPs to dispute exclusions in the event any quality of service indicators are imposed.

²² CNOC(Cable Carriers)24May17-9, 10, and 12. These responses discuss CNOC’s proposed indicators 1.1, 1.2, 2.1, 2.3, 2.3A, 2.4, and 2.4A. However, CNOC described similar rules for exclusions for most of the other service indicators it proposed, including 2.5, 2.6, 2.7, 2.7A, 2.8, 2.8A.

²³ CRTC, Telecom Decision 2005-20, paragraph 41, principle 6: “The RRP should maintain just and reasonable rates and must not operate as a penalty mechanism”.

45. The above illustrates numerous factors beyond the control of the wholesale service provider that can affect measuring the inputs for service indicators. This is particularly the case for indicators that rely on service intervals. The Commission should not impose a C Q of S regime based on service quality metrics that are biased by factors beyond the control of wholesale service providers.

5.0 Wholesale Service Quality Relative to Retail Service Quality

46. The fourth criterion is whether the quality of the wholesale service is the same, or inferior, to comparable retail services provided by the wholesale service provider. The Cable Carriers have provided evidence in this proceeding that the service quality of TPIA is equal to, or in some cases, better than that provided to their own retail high-speed Internet services.

47. The Cable Carriers provided specific evidence respecting the service quality of TPIA versus retail high-speed Internet services in their responses to ___(CRTC)24May17-A5.²⁴ Any differences are attributable to the time required for the Cable Carriers' CSGs to coordinate service requests with IISPs, and are consistent with the procedures agreed to in the TPIA Guidelines.

48. The following excerpts provide highlights of the comparability of service quality for wholesale and retail services.

“The difference between the average installation service delivery time associated with retail and wholesale in Ontario is directly related to the order processing for TPIA end-customers that requires coordination between Cogeco’s representative and the TPIA customer in order to confirm the date of the installation with the end-customer.

Since the time needed to execute the wholesale ordering process (normally answered and confirmed within 48 hours) is included in the calculation in the installation service delivery time, this explains why the average installation service delivery time associated with wholesale is slightly longer than the one associated with the installation of the retail Internet service. Therefore, in removing this execution delay, it is worth noting that **the average installation service delivery time for retail and wholesale compiled in the tables above is practically equivalent.**”²⁵ (emphasis added)

“Rogers has gathered information measuring on-time percentage for work orders (installations) and service orders (SO) as well as SO repeats. On-time percentage captures whether a technician arrived to the work order (WO) or SO on time according to the booked appointment time. SO repeats measures whether a SO requires multiple visits by a technician. These are symmetrical metrics which do not advantage or disadvantage either wholesale HSA or Rogers’ retail end-users. These metrics are not

²⁴ See also the response to Rogers(CRTC)24May17-A1.

²⁵ Cogeco(CRTC)24May17-A5 c).

reported internally for Rogers' retail and have strictly been compiled in response to this notice of consultation. Information is only available at the aggregate level for wholesale HSA customers and Rogers retail Internet services. The tables below show the On-time % and SO repeat % of wholesale HSA (TPIA) versus Rogers retail Internet services. Year to date, **wholesale HSA end-users have enjoyed equal if not better on-time percentage for WO and SO than Rogers retail end-users and equal if not better SO repeat percentage.**²⁶ (emphasis added)

"Rogers has gathered information measuring the Mean Time to Resolve (MTTR) trouble tickets, measured in hours. This metric simply captures from when the trouble ticket was opened until when it was closed. If, for example, a ticket required more information (i.e. the original ticket did not contain the required information for resolution) that would lengthen the MTTR, and is a key reason why the original agent capturing all the required elements is so important. By measuring this interval, consideration should be paid to the additional time necessary for wholesale HSA customers to communicate with the end-user or Rogers in cases of complications when comparing wholesale HSA (TPIA) against retail (RHSI). This metric is not reported internally for Rogers' retail and has strictly been compiled in response to this notice of consultation. Information is only available at the aggregate level for wholesale HSA customers and Rogers retail Internet services. The confidential figure below shows the MTTR of wholesale HSA versus Rogers retail Internet services. Over the past 3 years **wholesale HSA end-users have enjoyed equal if not better MTTR than Rogers retail end-users.**"²⁷ (emphasis added)

49. The similarity in service quality for wholesale and retail services is consistent with the fact that TPIA services are provided over shared network infrastructure and many of the same operational systems are used to support both wholesale and retail services. The Cable Carriers process TPIA service requests using the same appointment scheduling systems and technicians, once the service request has been vetted by the CSG.
50. The Cable Carriers' responses to ___(CRTC)24May17-A1 further demonstrate the extent to which service requests for wholesale and retail end-users are managed using the same systems and resources.
51. The Cable Carriers have also invested additional resources in TPIA service to maintain and improve service quality. Rogers gave examples of where it employed additional resources and effort to ensure WWSA customers received high quality of service.²⁸ Videotron described efforts it has taken to meet with IISPs to identify service improvements and

²⁶ Rogers(CRTC)24May17-A1 c).

²⁷ Rogers(CRTC)24May17-A5 c).

²⁸ Rogers(PIAC)24May17-16.

resolve problems.²⁹ Appendix A provides further details of the numerous improvements in the Cable Carriers' TPIA service.

52. CNOc, OpenMedia and PIAC argued that wholesale service providers have incentives to under invest in WHSA services resulting in inferior service quality relative to their own retail high-speed Internet services.³⁰ The Cable Carriers submit that there is no underinvestment in TPIA service, as demonstrated by the evidence that service quality for wholesale service is not inferior to retail service and the numerous TPIA service improvements. In any event, TPIA service is a regulated service for which the Commission approves rates designed to permit the recovery of reasonably incurred costs, consistent with Phase II principles. The resulting wholesale rates support sufficient levels of investment to provide the regulated services with adequate service quality.

5.1 Comparing service intervals for wholesale and retail services

53. Section 4 of these joint final reply comments describe the procedures involved in provisioning TPIA service, which are unique to the wholesale service and unnecessary for provisioning the Cable Carriers' retail high-speed Internet services. This necessarily results in differences in the length of time required to provide wholesale and retail services, thus rendering meaningless comparisons of service intervals for TPIA and the Cable Carriers' retail high-speed Internet service.
54. The time required to provision WHSA service is affected by activities that depend on the wholesale customer and its interactions with its end-user. A service interval for WHSA will include time for WHSA customers to respond to requests from the wholesale service provider and/or the WHSA customers' end-users. The service interval for provisioning a retail service to a Cable Carrier's own end-user does not involve an intermediary. As a result, the retail service interval may be shorter than wholesale service.
55. Another key difference between TPIA service and the Cable Carriers' retail high-speed Internet services is that the former is not an "end to end" service. Instead, TPIA service is used by the IISP in conjunction with its own services and equipment to fulfill the retail service. Notably, the IISP is responsible for ensuring the end-user has the appropriate modem. The Cable Carrier's technician does not install or test the cable modem. This difference complicates the initial service provisioning and troubleshooting technical problems.³¹

²⁹ Québecor Média(CNOc)24May17-10. See also Québecor Média(CRTC)24May17-B1.

³⁰ CNOc, initial comments, TNC 2017-49, paragraph 22; CNOc(CRTC)24May17-4; OpenMedia, initial comments, TNC 2017-49, paragraph 8; OpenMedia, request for further responses, TNC 2017-49, page 4; and PIAC, initial comments, TNC 2017-49, paragraph 80. It is noteworthy that PIAC's argument referred to past Commission decisions respecting the potential impact of price cap regulation on incentives to invest. Of course, the Cable Carriers' WHSA services are not subject to price cap regulation, and therefore, no such incentives exist.

³¹ See for example the response to Rogers(Teksavvy)24May17-7 a).

56. The Cable Carriers have noted in prior submissions that additional steps are involved in the provision of retail services by IISPs that use a combination of wholesale facilities and their own operations compared to provisioning by a single service provider.³²
57. The Commission has acknowledged that the quality of service can be affected when the components used to deliver the service are sourced from multiple suppliers, compared to when the components are under the control of a single entity.³³
58. Comparing service quality between wholesale and retail services on a truly “apples to apples” basis is problematic, at best. This is particularly true when comparing service intervals. As noted, most Cable Carriers do not track service intervals for retail or wholesale services.³⁴ Cable Carriers that do not track service intervals rely on metrics that measure whether the service is provisioned on time and correctly.
59. Cogeco stated that its technicians are evaluated based on a standard of “First Time Right”, which measures whether completed work orders for installations and repairs were related to repeated work on the same orders within the past 30 days.³⁵
60. Rogers explained that its standard for employees is to get “things right the first time with less emphasis on the speed at which it is done,” which prioritizes providing good customer service over getting things done quickly, but possibly with poor results.³⁶ The same standard is applied to both its retail and wholesale services.
61. Videotron stated that its metrics for service quality measures the percentage of missed appointments (excluding those missed for reasons not attributable to Videotron’s technicians or subcontractors), signal quality on the network, and answering a set percentage of calls to technical support within a specified interval.³⁷ These metrics are applied equally to its retail and wholesale services.
62. Eastlink’s standards for service delivery include targets for installation and repair that are applied equally to retail and wholesale services.³⁸ With respect to repair service calls, Eastlink strives to resolve service outages “as quickly as possible, while also ensuring that it is done correctly the first time.”³⁹
63. Shaw focuses its service quality efforts on ensuring the company achieves a high level of next day calendar availability for responding to service requests, applied equally to retail and

³² Cable Carriers, reply to CNOC’s Part 1 Application, November 29, 2013, paragraphs 21 and 22.

³³ Telecom Decision CRTC 2004-19, paragraph 24.

³⁴ Cogeco is the only Cable Carrier that measures service intervals for installation and repair, as noted in its response to Cogeco(CRTC)24May17-A1. Cogeco targets installations for both retail and wholesale services to occur within five days; and targets repairs to occur within two days 96% of the time.

³⁵ Cogeco(CRTC)24May17-A1 b).

³⁶ Rogers(CRTC)24May17-A1 b).

³⁷ Québecor Média(CRTC)24May17-A1 b).

³⁸ Bragg(CRTC)24May17-A4, applicable to larger serving areas.

³⁹ Ibid.

wholesale services.⁴⁰ In addition, Shaw monitors TPIA service order processing time to maintain compliance with the two business day standard for responding to TPIA customers' service requests.⁴¹

64. Service quality measured according to on-time service provisioning, in the case Rogers, or missed appointments, in the case of Videotron, demonstrate that wholesale service is provided at a level of service quality that matches, if not exceeds that provided for retail service. Moreover, the Cable Carriers apply the same service standards to their retail and wholesale services, further ensuring comparability in the level of service quality. These findings reinforce the other evidence that a C Q of S regime is not warranted for the Cable Carriers' WHSA service.

6.0 Cost-Benefit Analysis of C Q of S Regime

65. The fifth and final criterion is whether the establishment of a C Q of S regime would result in material benefits sufficient to outweigh the costs and administrative burden of developing, implementing and reporting C Q of S indicators. The record of this proceeding provides ample evidence of the many hurdles that would have to be overcome to develop and implement a C Q of S regime, all of which would impose substantial costs on the industry and divert resources that would otherwise be available to support WHSA services. By comparison, the potential benefits of a C Q of S regime would be insignificant in light of the existing service quality provided to wholesale and retail services. It must be concluded that the cost of a C Q of S regime would far outweigh any potential benefits and therefore no such regime is warranted.

6.1 Costs and resources to develop service quality indicators

66. The Cable Carriers do not have systems in place that could be leveraged to collect the information for quality of service indicators for WHSA service. The data that the Cable Carriers have been able to provide in response to requests for information was largely based on manually extracting information from various systems.⁴² Wholesale service providers were not always able to provide information separately for retail and wholesale services, and none of the information requested was available disaggregated by individual IISP wholesale customers. There were many instances where the wholesale service providers could not provide any of the data requested.
67. The Cable Carriers would need to develop new systems to collect and compile data prior to implementing any of the proposed service indicators. However, this work would need to be preceded by a number of steps. Which quality of service indicators would be measured,

⁴⁰ Shaw(CRTC)24May17-A4, A5.

⁴¹ Shaw(CRTC)24May17-A5 a) b).

⁴² See the responses of the individual Cable Carriers to ____ (CRTC)24May17-A1 and A5.

what would be the level of aggregation, geographic scope, numerators, denominators, service standards, business rules and exclusions?

68. Past experience with the existing C Q of S regime's service indicators for the regulated wholesale services of the ILECs for the wireline telephony market shows that completing these steps would not be a trivial exercise, as noted in the Cable Carriers initial comments.

"The ILECs' C Q of S regime was the subject of a number of proceedings and determinations in the period from 1997 to 2005.⁴³ As a result of these proceedings, and negotiations conducted under CISC, the number of indicators grew from three to 23."⁴⁴

69. The Cable Carriers do not agree with CNOC's assertions that results of those proceedings would serve to simplify or expedite the effort required to develop service indicators, including standards and/or service intervals. The Cable Carriers do not have existing systems that track service indicators, nor direct experience with such a regulatory mechanism, unlike the ILECs. Even in the case of the ILECs, the mechanisms in place for the existing C Q of S regime could not be used to support a C Q of S regime for WHSA services.⁴⁵
70. One element of CNOC's proposal amply demonstrates the potential administrative burden of developing service indicators. Any set of service indicators should include rules for excluding incidents when the standard is missed due to factors that are beyond the control of the wholesale service provider. This is a complex exercise in itself. However, as discussed elsewhere in these joint final reply comments, CNOC proposed an exclusion rule for certain service indicators that would allow IISPs to negate any exclusions they dispute. The potential for lengthy, and costly, arguments over disputed exclusions is readily apparent.
71. CNOC proposed that service intervals would be benchmarked against the retail service intervals,⁴⁶ which in turn would necessitate a follow-up proceeding to determine. The Cable Carriers do not track service intervals for retail service, and would have to incur additional costs to collect this information. However, the value of undertaking this task is highly questionable. Retail service intervals cannot be meaningfully compared to wholesale service intervals for the reasons stated in sections 4.3 and 5.1. Engaging in this exercise would be costly but of no value to the development of service standards for wholesale services, and thus provide no benefit.
72. The potential cost of a C Q of S regime for TPIA service has implications for the wholesale rates. TPIA rates would need to be increased to recover the additional costs of implementing and maintaining a C Q of S regime. In addition, a C Q of S regime could bring about standards for service provisioning that could only be satisfied by system changes and additional resources to support TPIA services. These costs would be in addition to the

⁴³ Telecom Decision 2000-24, Telecom Decision 2001-217, Telecom Decision 2001-366, Telecom Decision 2001-638, Telecom Decision 2002-34, Telecom Decision 2003-72, Telecom Decision 2005-20.

⁴⁴ Cable Carriers, joint initial comments, TNC 2017-49, paragraph 55.

⁴⁵ Bell et al(CRTC)24May17-5 b); and TELUS(CRTC)24May17-5 b).

⁴⁶ CNOC(Cable Carriers)24May17-5.

process-related costs that would be incurred to develop, implement and maintain the C Q of S regime.

73. The Cable Carriers do not agree with CNOC's assertion that the cost of implementing a C Q of S regime is not an allowable cost under Phase II costing principles.⁴⁷ CNOC failed to demonstrate that the costs for IT systems development and service provisioning would not constitute an expense incurred to provide TPIA service. The costs associated with implementing and maintaining any C Q of S regime should be treated the same as the costs for end-user support-related expenses and CSG expenses, which the Commission previously approved for recovery in TPIA tariffed rates.⁴⁸
74. Imposing a C Q of S regime would require adjustments to TPIA wholesale rates to recover the properly incurred costs associated with developing and maintaining the service indicators. Higher rates for TPIA service, while justified under such circumstances, would counteract measures by the Commission to establish rates that do not impede IISPs from competing in the retail high-speed Internet services market. Even setting aside issues of wholesale rates, the resources required to undertake the development and implementation of a C Q of S regime would divert resources from the Cable Carriers' ongoing efforts to improve TPIA service delivery. IISPs and their end-users would be even less likely to experience positive benefits of a C Q of S regime as a result.
75. The following excerpts from the Cable Carriers' responses to requests for information provide further insight of the potential impact of a C Q of S regime on the resources available to provide TPIA service.

"Eastlink strongly opposes the expansion of the Q of S regime to include a HAS component, as this would simply create more work, require additional resources (which we simply do not have) and would require allocation of scarce resources from important projects to comply with a new reporting function, providing no real value where no apparent issues exist."⁴⁹

"Rogers has strived to improve its customer service and as such has implemented and maintained high quality of service standards for wholesale HSA on par with that delivered to Rogers retail end-users. This high level of quality of service has been developed with years of experience and mutual cooperation with Rogers' partners and the industry. Any such QoS regime change contemplated seeks to up-end and possibly divert resources from further progress in improving the customer experience of all parties and consumers."⁵⁰

⁴⁷ CNOC(Cable Carriers)24May17-1.

⁴⁸ CRTC, Telecom Decision 2006-77, paragraphs 127 to 133.

⁴⁹ Bragg(CRTC)24May17-A1 c).

⁵⁰ Rogers(CRTC)24May17-A5 c).

“Bref, les FSI de gros ont de nombreux forums et autres mécanismes pour vérifier la qualité des services AHV de gros qu’ils reçoivent et pour faire valoir leurs suggestions d’amélioration. De plus, ces forums et mécanismes ont été à l’origine d’une longue série de changements au bénéfice évident des FSI de gros. La mise en place d’un régime complexe et coûteux de collecte et de suivi d’indicateurs formels de qualité de service serait non seulement injustifiable en soi, il risquerait de détourner l’attention de toutes les nouvelles opportunités d’amélioration qui vont se présenter au cours des prochaines années.”⁵¹

7.0 CNOC’s proposed C Q of S Regime

76. CNOC’s proposed C Q of S regime for WHSA services in this proceeding is essentially unchanged from that it proposed in its Part 1 Application of September 2013.⁵² The submissions of PIAC and Teksavvy in this proceeding have adopted this proposal.⁵³
77. The Commission concluded in Telecom Decision 2015-40 that the complaints raised by CNOC in its Part 1 Application did not support CNOC’s claim of unjust discrimination and did not adopt CNOC’s request to impose a C Q of S regime on TPIA service.⁵⁴ Notwithstanding this finding, and the subsequent improvements in TPIA service, these parties maintained that a C Q of S regime is justified. Their arguments do not rest on any substantiated evidence of problems with the quality of service for TPIA service. Rather, they have sought to justify a C Q of S regime as a necessary regulatory intervention “just in case” and as a deterrent against the potential for inferior service quality.
78. CNOC’s criteria for whether a C Q of S regime should be imposed consists of just two considerations – is the wholesale service mandated, and could the service be delivered at different levels of service quality.⁵⁵ CNOC could not think of any regulated wholesale service that would not meet these criteria.⁵⁶ Notably absent from these criteria is any consideration of evidence that the quality of service for wholesale services has fallen, or is likely to fall, below acceptable standards.
79. It is CNOC’s intention to have the regime apply to all regulated wholesale services and service providers unless the wholesale service provider can demonstrate that the wholesale service should not be included in the regime.⁵⁷ This essentially reverses the onus for determining whether a wholesale service provider has engaged in discriminatory or preferential behaviour, which under the *Telecommunications Act* is the responsibility of the

⁵¹ Québecor Média(CRTC)24May17-B1.

⁵² CNOC, initial comments, TNC 2017-49, paragraphs 33 and 44.

⁵³ PIAC, initial comments, TNC 2017-49, paragraph 67; Teksavvy, initial comments, TNC 2017-49, paragraphs 14, 29 and 34.

⁵⁴ CRTC, Telecom Decision 2015-40, paragraph 17.

⁵⁵ CNOC, initial comments, TNC 2017-49, paragraph 57, and CNOC(CRTC)24May17-1.

⁵⁶ CNOC(Cable Carriers)24May17-15.

⁵⁷ CNOC(Cable Carriers)24May17-16 c).

applicant. As the Commission noted in Telecom Decision 2015-40, “The burden is on the applicant to demonstrate that the conduct is discriminatory or preferential.”⁵⁸ CNOC failed to meet this test in this proceeding. Conversely, the Cable Carriers have provided evidence that demonstrates the level of service quality provided to wholesale and retail services is comparable, and not unduly discriminatory.

80. The Cable Carriers submit that the Commission should reject CNOC’s proposed C Q of S regime as flawed and inconsistent with the Policy Direction that regulation be imposed only where necessary and only in an efficient and proportionate manner.⁵⁹
81. Submissions by CNOC in this proceeding vastly understate the magnitude of the effort that would be required to implement a C Q of S regime for WHSA service. CNOC claimed that the C Q of S regime that currently applies to certain of the ILECs’ regulated wholesale services can serve as a “template” for WHSA that the Commission and the industry can draw upon to “to finalize and deploy a modernized competitor Q of S framework in a timely and cost-effective manner.”⁶⁰ However, CNOC’s proposed regime would involve numerous changes and follow-up activities that belie its claims of simplicity and cost-effectiveness.
82. CNOC’s proposal for a C Q of S regime includes 17 indicators, four of which would be measured on a company-wide basis and the remaining 13 broken out for each IISP that is a customer of a WHSA service.⁶¹ CNOC also proposed to apply a Rate Rebate Plan (“RRP”) to the 13 IISP-specific indicators that would provide compensation to IISPs when service quality did not meet the standards for a given indicator. On top of the RRP, CNOC proposed a repeat failure mechanism that would further compensate IISPs if a standard is not met for more than one month.⁶²
83. CNOC acknowledged that the Commission had previously rejected a repeat failure mechanism for the ILECs’ C Q of S regime. Yet CNOC claimed it was necessary for WHSA services “to curb repeated and prolonged non-compliance with specific Q of S indicators,” and argued that “competitors continuously struggle to obtain adequate Q of S levels with respect to certain indicators.”⁶³ When asked for evidence of such “continuous” problems, CNOC noted that “Most CNOC members do not track and maintain detailed records” of quality of service issues.⁶⁴ The Cable Carriers were provided with some information on service quality that was compiled by CNOC members in response to requests for information in this proceeding.⁶⁵ The Cable Carriers’ assessment of this information, filed

⁵⁸ CRTC, Telecom Decision 2015-40, paragraph 16.

⁵⁹ *Order Issuing a Direction to the CRTC on Implementing the Canadian Telecommunications Policy Objectives*, P.C. 2006-1534, 14 December 2006 (“Policy Direction”), 1 (a) (ii).

⁶⁰ CNOC, initial comments, TNC 2017-49, paragraph 8.

⁶¹ *Ibid.*, section 2.7.2, pages 15 to 33.

⁶² *Ibid.*, paragraph 33.

⁶³ *Ibid.*

⁶⁴ CNOC(Cable Carriers)24May17-2.

⁶⁵ CNOC(CRTC)24May17-2. Information specific to individual Cable Carriers was provided in confidence to each carrier.

separately in their individual final reply comments, demonstrates that there is no basis for CNOC's claim of "continuous" problems with service quality.

84. In fact, CNOC's proposal for a repeat failure mechanism is not driven by facts on the ground that there are "continuous" problems. Rather, it is yet another example of CNOC's "just in case" regulatory scheme.

"Just because repeated and prolonged non-compliance has not yet occurred does not mean that it may not manifest itself in the future. CNOC's repeat failure mechanism is intended to achieve both specific deterrence (i.e. to deter a specific provider from continuing to repeatedly fail a Q of S indicator) and general deterrence (i.e. preventing other providers who have not yet repeatedly failed on a given Q of S indicator from doing so)."⁶⁶

85. CNOC similarly argued that the C Q of S regime should include an RRP mechanism as a deterrent for wholesale service providers, regardless of whether there was any evidence of their service quality failing to meet service standards.⁶⁷

86. CNOC's proposals for an RRP and repeat failure mechanism are at odds with the Commission's past practices for a C Q of S regime. The Commission rejected such tools in the past absent evidence such measures were justified based on ongoing service quality deficiencies.⁶⁸ Moreover, it would be contrary to the Policy Direction. In any case, such "just in case" regulatory mechanisms would fail to satisfy the cost-benefit analysis test.

87. There are also numerous problems with the 17 service indicators proposed by CNOC, over and above the barriers to establishing the systems that would ultimately be needed in order track and compile the information as proposed. Assuming that information could be made available, the service indicators proposed by CNOC would result in duplicate measures of the same activities.

88. CNOC's proposed indicators 2.1 and 2.3 would both measure whether a new order for service installation was provisioned within a reasonable period of time for cases requiring a technician dispatch. (Proposed indicators 2.2 and 2.4 would measure the same metrics for cases that do not require a technician dispatch.) Proposed indicator 2.1 measures orders that met an established service interval while 2.3 measures orders that met the confirmed due date. There is likely to be a high degree of correlation among those orders that fail to meet the service interval and the confirmed due date.⁶⁹ Take the case of a new order for

⁶⁶ CNOC(Cable Carriers)24May17-4 a).

⁶⁷ CNOC(Cable Carriers)24May17-4 b).

⁶⁸ CRTC, Telecom Decision 2002-34, paragraphs 706 to 708 and 783; Telecom Decision 2005-20, paragraph 97.

⁶⁹ The clarification provided by CNOC in its response to CNOC(Cable Carriers)24May17-11 does not eliminate the duplication.

which the confirmed due date is set to occur within the established service interval.⁷⁰ If the technician is unable to complete the installation on the confirmed due date, perhaps due to technical problems encountered at the end-user premise, then this one incident is counted twice for failing to meet both indicators 2.1 and 2.3.

89. CNOC's proposed indicators 2.5 and 2.7 would both measure whether a service was repaired within a reasonable period of time for cases requiring a technician dispatch. (Proposed indicators 2.6 and 2.8 would measure the same metrics for cases that do not require a technician dispatch.) These indicators give rise to the same duplication problem noted for new orders for service installation.⁷¹
90. CNOC did not demonstrate the value of having separate indicators for tracking whether the order or repair met the applicable service interval and the confirmed due date for the same service order or repair ticket. There is no similar duplication found in the existing C Q of S indicators that apply to the ILECs. In past reviews of C Q of S indicators for the ILECs, the Commission noted that a due date can be considered to have been met when a service interval is met, thus equating the two.⁷²
91. The problem with duplicative service indicators is not just the added cost and administrative burden associated with compiling this information. The more serious problem is that duplicative service indicators would unduly penalize a wholesale service provider when subject to an RRP. It is directly contrary to the fourth principle the Commission established for RRP for competitors, which states: "Q of S indicators to be included in the RRP should be such that they do not duplicate activities that are already measured by other indicators in the RRP".⁷³ The punitive nature of duplicative indicators would be further exacerbated by the repeat failure mechanism that CNOC proposed.
92. CNOC proposed a time frame for implementing its C Q of S regime of 120 days.⁷⁴ This is entirely unrealistic, given the flaws in CNOC's proposed service indicators. The 120 day period suggested by CNOC is far too little time to resolve the numerous problems, yet alone develop the necessary systems and procedures to implement a set of approved service indicators.
93. To the extent a C Q of S regime is applied to WHSA service, there would need to be an appropriate phase in period, which would commence following the development, testing and final approval of the indicators. The length of the phase in period should be no less than one

⁷⁰ As discussed elsewhere in these joint final reply comments, a new order for service installation may occur outside a given service interval should the end-user requests an installation several days or weeks in advance.

⁷¹ The clarification provided by CNOC in its response to CNOC(Cable Carriers)24May17-13 does not eliminate the duplication.

⁷² CRTC' Telecom Decision 2001-366: "With regard to Indicator 1.16 the Commission finds that the due date is to be considered met if the order is completed within the standard service interval." This indicator was subsequently renumbered as indicator 1.11A in Telecom Decision 2003-72.

⁷³ CRTC, Telecom Decision 2005-20, paragraph 41.

⁷⁴ CNOC, initial comments, TNC 2017-49, paragraph 70 and CNOC(Cable Carriers)24May17-17.

year from the date of the Commission's approval. The time required to develop and test the systems prior to the phase in period would depend on the scope and complexity of the C Q of S service indicators and related obligations imposed.

8.0 Alternatives to a C Q of S Regime

94. The Cable Carriers remain of the view a C Q of S regime is not warranted for any regulated wholesale service, and in particular, not for WHSA services. This is fully supported by the Cable Carriers' analytical framework for assessing the requirement for C Q of S according to five criteria applied to the circumstances of these services. There are other more timely and cost-effective means for ensuring a reasonable level of service quality.

95. Collaboration between industry participants has proven to be an effective way to resolve issues. As noted by the Commission in TD 2015-40, "allowing the industry to generate solutions is likely the most effective and efficient way" to respond to the concerns that CNOC raised in its application of September 2013.⁷⁵ The Cable Carriers have worked closely with TPIA customers to resolve provisioning concerns identified by CNOC and IISPs. This has been beneficial to TPIA customers, as acknowledged by CNOC and Teksavvy.

"[T]here were were positive outcomes from the CNOC Cable Q of S Application"⁷⁶

"To be sure, CRTC directives ordering that certain matters be worked out in CRTC supervised interconnection steering committees may yet result in tangible action in certain areas. And, with respect to certain matters, incremental improvements have been achieved."⁷⁷ (footnote omitted)

96. The Cable Carriers have worked with representatives of CNOC and IISPs under the auspices of the CISC 1540 Working Group to develop the TPIA Guidelines.⁷⁸ The TPIA Guidelines are a detailed set of procedures for handling service installations and troubleshooting technical problems, resolving disputes and managing customer transfers. The report to the CISC Steering Committee that the industry participants intend to file shortly with the Commission, along with the TPIA Guidelines, indicates consensus on almost all issues discussed.

97. The Cable Carriers also joined a broad group of industry participants in the CISC Business Process Working Group ("BPWG") to examine the development of a standardized notification form for network changes and the harmonization of notification standards. The BPWG reached a consensus to proceed with the development of a standardized notification form for Commission-mandated WHSA services. The BPWG also agreed to review the

⁷⁵ TD 2015-40, paragraph 23.

⁷⁶ CNOC, initial comments, TNC 2017-49, paragraph 3.

⁷⁷ Teksavvy, initial comments, TNC 2017-49, paragraph 15.

⁷⁸ Eastlink did not participate in the CISC 1540 Working Group, established pursuant to Telecom Decision 2015-40, as Eastlink was not a party to the proceeding leading up to that decision.

standardized notification form following the completion of the work of the CISC 1540 Working Group on a related task. The resulting consensus report was approved by the Commission in Telecom Decision 2017-289.

98. These outcomes further demonstrate that the multilateral format of CISC can be an effective mechanism for addressing issues that relate to the quality of WHSA services.
99. In addition to bilateral and multilateral negotiations, there are other tools available to assist parties in the resolution of service quality concerns. These include Commission-supervised dispute resolution mechanisms and Part 1 applications. The Commission could also consider a complaints-based model as a means of monitoring situations where concerns of poor service quality have been documented.
100. Under a complaints-based model, the wholesale service provider would provide the Commission with information obtained from the investigation of a specific complaint, and would provide a copy to the wholesale customer. The investigation process would depend on receiving sufficiently detailed information from the wholesale customer regarding the date, service address and wholesale facilities associated with the incident. The results of the investigation of a complaint would include the details provided by the wholesale customer, whether the complaint was due to factors under the control of the Cable Carrier and action taken by the Cable Carrier to resolve problems that were under its control.
101. If in the alternative, the Commission determines that it should impose any C Q of S service indicators for WHSA services, the Cable Carriers would strongly urge the Commission to limit the scope to metrics that could measure service quality on a reliable and consistent basis and in a manner that can reasonably be compared to retail service quality.
102. The Cable Carriers submit that a limited set of service indicators would track the percentage of competitor installation met and the percentage of repair appointments met.⁷⁹ These indicators would be more readily comparable as between wholesale and retail services and would avoid many, but not all, of the problems associated with indicators based on service intervals.⁸⁰ The Cable Carriers disagree with CNOC's contention that wholesale service providers might circumvent such indicators "simply by booking wholesale activity windows that are excessively long relative to the corresponding retail activity windows."⁸¹ The Cable Carriers use the same appointment scheduling systems to book appointments for retail and

⁷⁹ See for example, the service indicators under the existing C Q of S regime: 1.6, Competitor Installation Appointments Met, and 2.6, Competitor Repair Appointments Met, as defined in Appendix B of Telecom Decision 2005-20.

⁸⁰ Service indicators based on the proportion of appointments met would need to have rules for excluding missed appointments attributable to wholesale customers or their end-users. However, the exclusion rule should not permit the wholesale customer to veto exclusions simply by disputing that it caused the appointment to be missed. See CNOC(Cable Carriers)24May17-9 b).

⁸¹ CNOC, initial comments, TNC 2017-49, paragraph 45.

wholesale service requests, with all appointments scheduled on a first come, first served basis.⁸²

103. It would not be practical or necessary to establish separate metrics for appointments that do, and do not, require technician dispatch. The Cable Carriers disagree with CNOC's claim that doing so would benefit either the wholesale service provider or wholesale customer.
104. The service indicators on appointments met should be measured on a company-wide basis. It would be administratively difficult and costly to modify systems so as to disaggregate information by WHSA customers. Company-wide indicators do not support a RRP, consistent with the second principle for a RRP as set out in Telecom Decision 2005-20.⁸³
105. Moreover, there is no justification for instituting a RRP to accompany a C Q of S regime for WHSA services. The RRP that applies to the existing C Q of S regime was not introduced until several years of monitoring service indicators that revealed ongoing substandard performance.⁸⁴ The evidence that WHSA services achieve a reasonable level of service quality demonstrates that no RRP is warranted in any case.

9.0 Conclusion

106. The purpose of this proceeding is to determine whether the existing C Q of S regime should be maintained, and if so in what form, or phased out; and whether any C Q of S regime is warranted for other regulated wholesale services, and if so, in what form. The Cable Carriers submit that, not only is the existing regime no longer warranted, there is no reason to impose a C Q of S regime on other regulated wholesale services.
107. The Cable Carriers presented a comprehensive analytical framework for assessing whether a C Q of S regime is warranted, consisting of five objective and transparent criteria. The application of this framework to the evidence consistently demonstrates that the Commission should not impose a C Q of S regime on WHSA services.
108. It would be contrary to the Policy Direction to establish such a costly and burdensome regulation for WHSA services when there is no evidence that such regulatory intervention is justified.
109. A C Q of S regime would not benefit the IISPs, wholesale service providers or consumers. To the contrary, it would impose unnecessary costs and divert resources from the provision of TPIA services. The Cable Carriers' TPIA services are provisioned at a reasonable level of service quality that has, and will continue to, support IISPs competitive position in the retail market.

⁸² See the Cable Carriers' responses to ___(CRTC)24May17-A1.

⁸³ CRTC, Telecom Decision 2005-20, paragraph 41.

⁸⁴ CRTC, Telecom Decision 2002-34, paragraph 706.

110. The Commission should endorse the ongoing efforts of industry stakeholders to work collaboratively in ensuring high quality service that benefits all consumers, and not risk disrupting the progress by mandating a C Q of S regime.

Appendix A - Cable Carriers' TPIA Service Improvements

Eastlink⁸⁵

- Implemented initiatives to reduce missed installation and repair appointments, including appointment reminder calls and text messages; this applies for appointments related to wholesale and retail service requests
- Introduced shorter appointment windows in certain serving areas, resulting in more convenient appointment times and reduced missed appointments; this applies to technicians working on wholesale and retail service requests

Cogeco⁸⁶

- Implemented "Dependable IT", a web portal for the order management of service requests from TPIA customers, including requests related to installations, trouble tickets, modem service checks and speed package changes; the portal enables TPIA customers to monitor the status of such requests
- implemented First Time Right ("FTR"), which is a service quality metric for improving delivery of service by technicians; this applies to technicians working on wholesale and retail service requests

Rogers⁸⁷

- introduced the TPIA Portal, a web-based service platform, enabling wholesale customers to verify the serviceability of the end-user's address in real-time, check the status of installation requests and obtain TPIA Program notifications
- improved response time for wholesale customers' requests for service tier changes, modem swaps
- implemented daily end of day work order reporting for TPIA customers indicating status of outstanding work orders
- provided TPIA customers with access to Rogers' modem diagnostic tool via the TPIA Portal
- implemented Border Gateway Protocol ("BGP"), enabling TPIA customers to more easily investigate possible failures on a TPIA interconnection circuit

⁸⁵ See the responses to Bragg(CRTC)24May17-A4 and Bragg(CNOC)24May17-5, 6.

⁸⁶ See the responses to Cogeco(CRTC)24May17-A1 and Cogeco(CNOC)24May17-5, 6.

⁸⁷ See Cable Carriers, initial comments, TNC 2017-49, paragraph 82; the responses to Rogers(CRTC)24May17-A1, B1, A5, and Rogers(CNOC)24May17-5, 6 (revised).

- implemented a call-ahead procedure for technicians to confirm appointments with end-users respecting installations and service calls; this applies to technicians working on wholesale and retail service requests
- invested in technician resources and tools that enable technicians to better diagnose and repair service quality issues on site; this applies to technicians working on wholesale and retail service requests
- implemented technician scorecard for evaluating technicians on performance objectives and to encourage high quality service; this applies to technicians working on wholesale and retail service requests
- improved targets for metrics of on-time and first time right (“FTR”) for installation and service orders; these metrics apply to wholesale and retail service requests
- established workforce availability targets for having a technician available within specific windows for service requests; this applies to technicians working on wholesale and retail service requests
- provided additional support to TPIA customers beyond standard operating procedures to resolve specific service issues as expeditiously as possible

Shaw⁸⁸

- increased the size of the team dedicated to delivering TPIA service, resulting in improved processes and provisioning timelines as well as responsiveness to TPIA customers’ requirements
- provided the TPIA CSG team with access to network diagnostic tools, resulting in reduced time for resolution of TPIA trouble tickets and fewer premise service calls
- implemented steps that reduced the occurrence of disconnection in error of TPIA customers’ end-users
- monitoring the 2 business day rule for processing TPIA service order requests, which assists in the evaluation and forecast of CSG staffing levels
- introduced a two-hour appointment window as part of the “Best Fit” appointment scheduling program, which improves routing capabilities and work order volumes; this applies to scheduling wholesale and retail appointments

⁸⁸ See Shaw, initial comments, TNC 2017-49, paragraph 30; and the responses to Shaw(CRTC)24May17-A5, Shaw(CNOC)24May17-5, 6 and 7.

- consolidated roles for technicians to combine installation and service functions into single “In-Premise Technician”, resulting in improved calendar availability; this applies to technicians responding to wholesale and retail work orders
- implemented a requirement for In-Premise Technicians to contact the customer prior to arriving at the appointment, resulting in fewer appointments not completed due to “Nobody Home”; this applies to technicians responding to wholesale and retail work orders

Videotron⁸⁹

- implemented an address verification tool allowing the customer service agents of TPIA customers to confirm whether a given civic address is served by Videotron’s HSA network before taking an end-user service order
- implemented direct telephone access to Videotron’s technical support team, including provision of automated messages respecting current network outages that could potentially affect TPIA customers’ end-users
- implemented a web portal for TPIA customers to submit requests for installations, service changes, disconnections and other transactions, and to receive confirmations and other information related to such transactions;
- included in this web portal the address verification tool and other automated control measures (for example as relate to modem serial numbers) to help eliminate errors and avoid rejected service requests
- implemented Bidirectional Forwarding Detection (“BFD”), enabling TPIA customers to investigate possible failures on a TPIA interconnection circuit
- implemented procedures for placing a generic call ahead notification by automatic dialler to TPIA customers’ end-users for all scheduled technician appointments to minimize missed appointments due to “Nobody Home” (currently in launch phase)
- included TPIA customer end-users in the process by which a technician will attempt to reach an end-user in real time in cases where he/she is not present at a scheduled appointment time
- implemented the daily sending to TPIA customers of lists of service windows that will be available in upcoming days for installations and repairs
- increased resources for installations and service repair, particularly during the peak period in Quebec for end-user relocations (around July 1)

⁸⁹ See Cable Carriers, initial comments, TNC 2017-49, paragraph 82; the responses to Québecor Média(CRTC)24May17-A1, B1, A5, and Québecor Média(CNOC)24May17-5, 6.

- improvements in on-time appointments for installation and repair work by Videotron technicians and subcontractor technicians
- reduced waiting time for Videotron's technical support service

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