



Telecom Decision CRTC 2021-280

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Appropriate network configuration for disaggregated wholesale high-speed access services – Requests for disclosure of certain information filed in confidence

The Commission **directs** Bell Aliant, a division of Bell Canada; Bell Canada; Bell MTS Inc.; Bragg Communications Incorporated, carrying on business as Eastlink; Cogeco Communications Inc.; Quebecor Media Inc., on behalf of Videotron Ltd.; Rogers Communications Canada Inc.; Saskatchewan Telecommunications; Shaw Cablesystems G.P.; and TELUS Communications Inc. (collectively, the wholesale service providers) to make available by **1 September 2021**, upon request and under agreed-upon non-disclosure provisions, the locations of incumbent local exchange carriers' central offices and cable carrier sites, which they had submitted in confidence to the Commission in the proceeding initiated by Telecom Notice of Consultation 2020-187, to wholesale customers who are registered with the Commission as telecommunications service providers and interveners in the proceeding, regardless of whether they are currently customers of the wholesale service providers, as well as to the Competitive Network Operators of Canada and the British Columbia Broadband Association, as the representatives of certain wholesale customers.

Introduction

1. In Telecom Notice of Consultation 2020-187 (the Notice), the Commission issued a call for comments to address the appropriate network and service configurations for the disaggregated wholesale high-speed access (HSA) service regime for all wholesale HSA service providers across the country (the proceeding).
2. In the Appendix to the Notice, the Commission set out requests for information (RFIs) addressed to Bell Aliant, a division of Bell Canada (Bell Aliant); Bell Canada; Bell MTS Inc. (Bell MTS); Bragg Communications Incorporated, carrying on business as Eastlink (Eastlink); Cogeco Communications Inc. (Cogeco); Quebecor Media Inc., on behalf of Videotron Ltd. (Videotron); Rogers Communications Canada Inc. (RCCI); Saskatchewan Telecommunications (SaskTel); Shaw Cablesystems G.P. (Shaw); and TELUS Communications Inc. (TCI) (collectively, the wholesale service providers). The wholesale service providers filed their responses to the RFIs with the Commission.

3. In a letter to the Commission dated 14 August 2020, the Competitive Network Operators of Canada (CNOC) filed requests for the disclosure of certain information that had been filed in confidence in response to certain questions in the RFIs. On 24 and 26 August 2020, the wholesale service providers responded to those requests.
4. On 28 September 2020, a staff [letter](#) was issued regarding the requests for disclosure of information filed in confidence and requested that certain wholesale service providers, namely Eastlink, RCCI, Shaw, TCI, and Videotron, place their site names on the public record.
5. By letter dated 13 October 2020, CNOC filed a request for a Commission determination on its requests for disclosure of certain information that had been filed in confidence.
6. TekSavvy Solutions Inc., Vaxination Informatique (Vaxination), and the wholesale service providers made submissions regarding CNOC's requests for disclosure of certain information that had been filed in confidence.
7. To make its determination regarding CNOC's request, the Commission will consider each of the questions in the RFIs for which CNOC has specifically requested the disclosure of information designated as confidential.

Preliminary matters

General arguments from CNOC

8. In addition to the specific requests for disclosure, CNOC provided general arguments as to why the Commission should require the wholesale service providers to disclose the requested information.
9. CNOC submitted that the staff letter did not address the disclosure of any critical information necessary for full and constructive participation in the proceeding initiated by the Notice. It also argued that the staff letter failed to appropriately balance the public interest of disclosure, as informed by the contextual factors surrounding the proceeding, against claims of specific direct harm.
10. CNOC highlighted the following factors to contextualize its disclosure request:
 - the usual factors that the Commission needs to balance when ruling on disclosure requests;
 - the need for information in order to properly address specific issues raised in the Notice;
 - the lack of viability of the existing regime for disaggregated wholesale HSA services, the urgency surrounding the proceeding, and the resulting need for disclosure;

- other means, such as non-disclosure agreements (NDAs), to ensure that interveners have access to sufficient information filed in confidence, should the Commission determine that certain information should not be disclosed on the public record, including an approach that CNOC proposed related to the one the Commission applied in Compliance and Enforcement and Telecom Decision 2020-7, where the Commission directed disclosure to interveners under NDAs, but not to the general public; and
- the 2019 Policy Direction¹ and the clear guidance it provides in respect to the public interest that the Commission must weigh when assessing disclosure requests.

General replies from wholesale service providers

11. The wholesale service providers generally submitted that each of these requests for disclosure would cause them specific and direct harm and that the information should not be disclosed on the public record.
12. In addition, certain wholesale service providers commented on the overall contextual factors highlighted by CNOC.
13. Cogeco rejected CNOC's contextual arguments. Cogeco submitted that CNOC's present request for further disclosure should be rejected, because CNOC reiterated the same arguments put forth in its initial request for disclosure and there has not been any change in circumstances or facts since the release of the staff letter.
14. Cogeco submitted that the sharing of confidential information in Compliance and Enforcement and Telecom Decision 2020-7 was done in a very specific manner in order to share limited technical information that would allow parties to better understand the technological tools used by Bell Canada and their impact on the Canadian telecommunications network.
15. Cogeco further submitted that CNOC's request would excessively increase the scope of the audience for the confidential information being shared. It would lead to highly confidential details of its networks being shared, not only with CNOC and its member organizations, but also with any outside counsel or consultants in their employ.
16. Cogeco submitted that sharing such detailed network and market information with its competitors would result in specific and direct harm to Cogeco. Regardless of whether or not this information was released under an NDA, Cogeco would have no control over where the information would go, with whom it would be shared, and for what purpose it would be used in the future. In Cogeco's view, the third-party

¹ *Order Issuing a Direction to the CRTC on Implementing the Canadian Telecommunications Policy Objectives to Promote Competition, Affordability, Consumer Interests and Innovation, SOR/2019-227, 17 June 2019*

Internet access (TPIA) resellers could easily use such information to better target sales and marketing campaigns to Cogeco retail customers, thereby leading to higher churn rates, greater acquisition costs, slower revenue growth and, ultimately, a loss of customers, all through the advantageous use of internal confidential information.

17. Shaw submitted that CNOC's submission is simply a reiteration of the arguments put forth in its original disclosure request and that CNOC has presented no new compelling reason to justify a variance of the staff letter.
18. Bell Canada and RCCI each submitted that the specifics of Compliance and Enforcement and Telecom Decision 2020-7 do not align with disclosure requests of the type requested by CNOC in the proceeding. The approach in Compliance and Enforcement and Telecom Decision 2020-7 allowed parties that did not stand to commercially benefit from the information to have access to confidential information, which is not the case here.
19. Bell Canada further submitted that, in the wholesale HSA context at hand, there are two broad categories of information that are designated as confidential. The first type relates to concrete central office (CO) information, such as their exact locations. This information could be released to wholesale customers subject to NDAs because, subject to safeguards, possession of this information by wholesale customers would not pose a security risk to the network. The second type of information, however, relates to commercially and competitively sensitive information about retail and wholesale business. The disclosure of this information would cause specific and direct harm to Bell Canada and an NDA would do nothing to mitigate these risks.

Commission's analysis and determinations

20. The Commission considers that the five contextual factors outlined by CNOC are generally aimed at highlighting CNOC's views on the public interest considerations, which favour disclosure. However, they do not alter the overall framework for the assessment of disclosure requests, which looks at whether disclosure of the information would be likely to result in specific direct harm and whether that harm would outweigh the public interest in disclosure.
21. With respect to the need for information in order to properly address specific issues raised in the Notice, the Commission has taken into account the specific context of the proceeding, namely determining the appropriate level of disaggregation and configurations for a disaggregated wholesale HSA service regime, and what information is necessary for parties to meaningfully participate and contribute to a fulsome record in this regard.
22. The Commission has carefully assessed the specific direct harm to the wholesale service providers that would likely result from disclosure and has weighed it against the public interest in disclosure of the information at hand. In particular, the Commission has examined whether the information disclosed will effectively

contribute to a more fulsome and complete record of the proceeding for the Commission to make a determination that will facilitate the deployment of disaggregated wholesale HSA services across the country.

Should the Commission approve CNOC's request for the disclosure of certain information filed in confidence?

**Question 1.c. for incumbent local exchange carriers (ILECs) and cable carriers:
The total number of aggregated wholesale HSA service end-users per province**

Positions of parties

23. Bell Canada, Cogeco, Eastlink, RCCI, SaskTel, and TCI submitted that disclosing the information requested would allow competitors to better develop retail strategies against them.
24. CNOC argued that it is unclear how any competitor could devise competitive strategies based on the province-wide number of aggregated wholesale HSA service end-users.
25. CNOC submitted that this data is already routinely disclosed in costing proceedings in accordance with Telecom Regulatory Policy 2012-592. At this high level of aggregation, there is no competitive benefit to be gained from this information, which is otherwise highly relevant to the matters under examination in the Notice.
26. CNOC also submitted that this information, in conjunction with the number and location of points of interconnection (POIs) and details relating to premises passed that are capable of receiving HSA services at each site, will allow parties to make informed assessments of appropriate levels of disaggregation.
27. CNOC argued that, for these reasons, the public interest in disclosure outweighs any perceived specific harm from the disclosure of this highly aggregated information.
28. RCCI submitted that CNOC has confounded the disclosure requirements of telecommunications proceedings in general, as found in Broadcasting and Telecom Information Bulletin 2010-961, with the disclosure requirements regarding confidentiality of information used to establish wholesale service rates, as found in Telecom Regulatory Policy 2012-592. RCCI further submitted that because this proceeding is not a rate-setting proceeding, disclosure rules from Telecom Regulatory Policy 2012-592 do not apply.
29. Videotron submitted that in the Appendix to Telecom Regulatory Policy 2012-592, the Commission ordered the disclosure of information related to overall wholesale demand as part of costing studies. Accordingly, Videotron has no objection to disclosing the same information in this context, provided that the disclosure order apply equally to all wholesale service providers.

30. Shaw submitted that CNOC's request should be denied. However, it stated that it would put the response to question 1.c. on the public record, if the Commission deems that the public interest would be best served by publicly disclosing this information and provided that the disclosure order apply equally to all wholesale service providers.

Commission's analysis and determinations

Public interest

31. The Commission is of the view that this information is highly aggregated on its own and would not be useful for assessing which individual CO or site locations should be aggregated. As will be addressed below, the location of COs and sites, combined with the addressable market information, can assist in such assessments. However, the total number of aggregated HSA service end-users per province provides little useful additional information for assessing disaggregation levels.

Specific direct harm to the wholesale service providers

32. The Commission considers that the total number of aggregated wholesale HSA service end-users per province reveals competitively sensitive information concerning wholesale service providers' marketing and sales efforts in each province in which they operate. The Commission is of the view that existing or potential competitors could use this information to target wholesale service providers' business in each province.

Weighing the public interest versus the specific direct harm to the wholesale service providers

33. The Commission is of the view that, in the context of the proceeding which deals with the assessment of configurations for disaggregated HSA services, information on the total number of aggregated wholesale HSA service customers per province provides little value.
34. The Commission notes that Telecom Regulatory Policy 2012-592 does not require the disclosure on the public record of the total number of aggregated wholesale HSA end-users per province.
35. The Commission considers that this information is not required for meaningful participation in the proceeding. Accordingly, the value to the public interest of disclosing the total number of aggregated wholesale HSA service end-users per province is minimal.
36. The Commission considers that the likely specific direct harm to wholesale service providers due to the disclosure of this competitively sensitive information outweighs the public interest in disclosing the information.
37. Accordingly, the Commission determines that the responses to question 1.c. should not be disclosed on the public record.

**Questions 2.b., 2.c., and 2.d. for ILECs and 2.b. and 2.c. for cable carriers:
Locations of ILEC COs and cable carrier sites**

38. CNOC submitted that the disclosure of the information requested will allow parties to test the reasonableness of configuration proposals. CNOC further submitted that the location of COs and sites is also relevant to information disclosed in other RFI responses, such as the responses to question 2.f. (discussed below), in which the Commission asked about the sites with routing equipment. Just as this information is relevant to the Commission's assessment and modelling of disaggregated service configurations, so too is it relevant to the assessment and modelling by competitive service providers.
39. CNOC argued that this information will ultimately be disclosed to wholesale customers when they request interconnection for the purpose of obtaining disaggregated HSA services.
40. Bell Canada, Cogeco, Eastlink, RCCI, Shaw, and TCI argued that disclosure of the information related to the geographical location of a CO or site could create a severe security risk for network operations and that, for this reason, the information should not be publicly disclosed.
41. CNOC submitted that if the Commission finds that there is any merit to wholesale service providers' security concerns, then access to this information should be available pursuant to the modified approach CNOC proposed, related to the approach applied in Compliance and Enforcement and Telecom Decision 2020-7.
42. Shaw argued that it may be necessary for wholesale customers to obtain more detailed geographical information than will be available on the public record in order to assess proposed configurations and plan their transition to the disaggregated service.
43. Bell Canada, RCCI, Shaw, and Videotron proposed sending wholesale customers, upon request and under the non-disclosure provisions in place with each of their wholesale customers, the information filed in confidence with the Commission in response to these questions.

Commission's analysis and determinations

Public interest

44. The Commission considers that the information on the location of COs and sites is important for the specific purposes of the proceeding since it will assist interveners in assessing the disaggregated configuration proposals, specifically which CO or site locations should be aggregated, and their impact on operations.

Specific direct harm to the wholesale service providers

45. The Commission considers that the location of COs and sites is highly sensitive information that may cause specific direct harm to wholesale service providers if

publicly disclosed. The disclosure of this information would increase security risks and put the integrity of the wholesale service providers' networks at risk.

Weighing the public interest versus the specific direct harm to the wholesale service providers

46. Although the location of COs and sites is important information for interveners in relation to the specific purposes of the proceeding, the Commission considers that the harm attributed to the network security risks outweighs the benefits of publicly disclosing this information.
47. Nonetheless, given that the primary concern with respect to the responses to CNOC's requests is related to network security as opposed to competitive harm resulting from disclosing this information to wholesale customers, and considering the general openness demonstrated by Bell Canada, RCCI, Shaw, and Videotron towards disclosing this information to their wholesale service customers on request and subject to non-disclosure provisions, the Commission considers that the responses to questions 2.b., 2.c., and 2.d. for ILECs and 2.b. and 2.c. for cable carriers should be disclosed to wholesale customers who are registered with the Commission as telecommunications service providers and who are interveners in the proceeding, regardless of whether they are currently customers of the specific wholesale service providers, under agreed-upon NDAs.
48. Although some parties indicated they were open to disclosing the information to their own wholesale customers, the Commission is of the view that this information is particularly important for both the existing and potential wholesale customers of the wholesale service providers in order for them to participate meaningfully in the proceeding. As well, the disclosure under NDAs to both existing and potential wholesale customers who intervened in the proceeding should not raise security risks with respect to the wholesale service providers' networks.
49. CNOC and the British Columbia Broadband Association (BCBA) are associations with a membership of up to 30 wholesale customers that advocate for their members and represent these companies in the proceeding. Only disclosing this information to wholesale customers themselves and not to CNOC or BCBA, as the representatives of certain wholesale customers, would not be productive for the purposes of the proceeding. In addition, disclosing to CNOC and BCBA under NDA should not raise security risks with respect to the wholesale service providers' networks.
50. Accordingly, the Commission is of the view that, as the representatives of their members in the proceeding, and in order for them to meaningfully participate in it, CNOC and BCBA should also be able to have access to the responses to questions 2.b., 2.c., and 2.d. for ILECs and 2.b. and 2.c. for cable carriers, under agreed-upon non-disclosure provisions.
51. The Commission is of the view that the above approach strikes the appropriate balance between ensuring parties can participate meaningfully in the proceeding and mitigating any security risks.

52. Accordingly, the Commission **directs** the wholesale service providers to make available, by **1 September 2021**, the answers to the following requests for disclosure of information to wholesale customers who are registered with the Commission as telecommunications service providers and interveners in the proceeding, regardless of whether they are currently customers of the wholesale service providers, as well as to CNOC and BCBA as the representatives of certain wholesale customers, upon request and under agreed-upon non-disclosure provisions:
- ILECs:
 - 2.b. the Common Language Location Identifier of each CO;
 - 2.c. the civic address of each CO; and
 - 2.d. the longitude and latitude of each CO;
 - Cable carriers:
 - 2.b. the civic address of each site; and
 - 2.c. the longitude and latitude of each site.

Questions 2.g. and 2.h. for cable carriers and ILECs respectively: The total number of premises passed by HSA facilities that are capable of receiving HSA services for each site, along with a breakdown by technology

53. CNOC submitted that the information requested is vital to determining the addressable market served by each site and over each technology.
54. CNOC further submitted that this information is critical to assessing proposed disaggregated configurations, including assessing appropriate levels of disaggregation. Without this information, parties will not be able to discern whether there is any potential for a viable business case for the efficient deployment of disaggregated HSA service to specific sites.
55. CNOC submitted that RCCI's openness to provide the information under an NDA reveals that perceived harms resulting from disclosure can be addressed through the use of tools at the Commission's disposal.
56. Vaxination submitted that for the disaggregated model to work, the information on the number of homes served by each POI is necessary for evaluating whether a competitor has enough existing end-users at that POI to justify the high fixed costs to serve said POI.
57. Bell Canada, Cogeco, RCCI, SaskTel, Shaw, and TCI submitted that the information related to the number of high-speed capable subscribers by technology served by each site is highly disaggregated and its disclosure on the public record would provide existing and potential competitors with sensitive commercial information.

Specifically, these wholesale service providers submitted that the disclosure of this information would allow competitors to better position their own services and technologies and to develop business strategies that could cause them harm.

58. Bell Canada and Shaw submitted that collecting this information requires significant time, resources, and expense. They also noted that the information is available to all competitors who are willing to put reasonable efforts into their marketing intelligence.
59. Bell Canada further submitted that once it has identified all potential customer locations, retail or wholesale, it superimposes these potential customer locations on the actual HSA network footprint to count the total homes and business locations passed. Bell Canada added that this information is competitively sensitive and never publicly disclosed, because it would reveal the size of its addressable market.
60. Shaw further submitted that disclosure of this information to its wholesale customers at this stage of the proceeding would be premature. However, if the Commission were to mandate the disclosure of this information, Shaw submitted that it should only be required to make the information available to customers of its TPIA services, upon request and under the non-disclosure provisions it has in place with each of them.
61. RCCI submitted that it could disclose to the wholesale customers, upon request and under the non-disclosure provisions in place with each of these customers, the number of high-speed capable homes served by each site. This information was provided in confidence to the Commission in response to the questions in the RFIs.
62. Videotron submitted that it was opposed to the disclosure of this information to wholesale customers. However, if the Commission were to determine that disclosing this information was necessary to allow wholesale HSA service customers to assess the proposed disaggregated models, Videotron proposed that the information be provided, upon request and on a confidential basis, only to wholesale HSA service customers that have already signed a TPIA services agreement and a Customer Services Group agreement with Videotron.

Commission's analysis and determinations

Public interest

63. The Commission considers that competitors can use the information contained in the responses to these questions to assess the proposed disaggregated configurations. The Commission further notes that interveners could use the number of homes passed per CO or site to assess whether providing disaggregated HSA services at a CO or site is financially viable.

Specific direct harm to the wholesale service providers

64. The Commission considers that existing or potential competitors could use the total number of homes passed, and the breakdown by technology per CO or site, to develop targeted business and marketing strategies that could result in specific direct harm to wholesale service providers. The Commission further notes that the number of homes passed by access technology is sensitive information that is never disclosed publicly on a per CO or site basis.

Weighing the public interest versus the specific direct harm to the wholesale service providers

65. In its intervention dated 5 October 2020, CNOC described how it had estimated the premises served per CO or site location for Bell Canada, Cogeco, RCCI, and Videotron based on Statistics Canada census data matched to each CO or site location.² CNOC further suggested that the Commission could follow a similar approach in its analysis of disaggregated configurations.
66. Accordingly, the Commission is of the view that CNOC and the wholesale service providers' competitors have the ability to reasonably estimate the number of premises passed per CO or site using publicly available information. This allows them to participate effectively in the proceeding without having the specific information on the exact number of premises passed per CO or site by technology provided in these responses. Disclosure of this information to competitors will likely lead to specific direct harm to wholesale service providers, which is not outweighed by the benefits to the public interest. Therefore, it would not be appropriate to put the exact number of premises passed, along with a breakdown by technology, on the public record, nor to order the disclosure of this information via NDAs.
67. The Commission acknowledges that RCCI nonetheless expressed a willingness to disclose the number of high-speed capable homes served by each site to its TPIA customers, upon request and subject to an NDA. Although the Commission is of the view that the likely specific direct harm of disclosure of the responses to this question outweighs the public interest, parties are not precluded from disclosing this information by way of an NDA to their wholesale customers or any other party, should they choose to do so.
68. Accordingly, the Commission determines that the responses to questions 2.g. and 2.h. for cable carriers and ILECs respectively not be disclosed on the public record.

² CNOC provided an estimate of the number of homes passed per site using similar methodology in its submission as part of the Part 1 application to review and vary Telecom Regulatory Policy 2015-326 and Telecom Decision 2016-379 filed in 2018.

Question 2.f. for ILECs and cable carriers: Sites with routing equipment

69. CNOC submitted that responses to question 2.f. are critical in assessing the viability of the proposed disaggregated configurations. Without this information, parties will not be able to discern, out of hundreds of COs, which ones can support wholesale HSA services and which ones cannot. Likewise, knowledge of the maximum available competitor interface speed is critical to an assessment of proposed disaggregated configurations.
70. CNOC submitted that the information requested will ultimately be disclosed to wholesale customers looking to interconnect at COs or sites for the purpose of obtaining disaggregated HSA services. Delaying disclosure until the moment when wholesale customers start the interconnection process will only hinder the ability of parties to participate fully and constructively in the proceeding.
71. CNOC further submitted that access to this information will allow parties to submit comments with a view to facilitating entry and competition. It will also cause minimal disruption and changes to the wholesale HSA service providers' network and minimize deployment timelines and costs. Disclosure is therefore consistent with the objectives of the proceeding. For all of these reasons, disclosure of this information would significantly further the public interest. CNOC submitted that the benefits to the public interest exceed any perceived specific direct harm resulting from disclosure.
72. Videotron submitted that the disclosure of this information would allow its competitors to better understand its cost structure, thus allowing them to develop business strategies that would cause serious and direct harm to Videotron.
73. TCI submitted that the disclosure of the specific capacities of individual locations would provide its competitors with very detailed information on its network and enable them to implement strategies that could prejudice its competitive position.
74. Bell Canada, RCCI, Shaw, TCI, and Videotron submitted that the release of this information on the public record would provide their competitors with access to competitively sensitive information that they would not otherwise have access to, since this information is never filed publicly.
75. Bell Canada, Eastlink, RCCI, Shaw, and TCI submitted that releasing this information would provide an extensive amount of details on the public record about the network architecture and the location of strategic aggregation points, which would pose network security threats.
76. Bell Canada and TCI further submitted that parties already have the list of COs that are capable of providing wholesale HSA services since the list that it filed only lists COs capable of providing HSA services and, by extension, wholesale HSA services.
77. RCCI submitted that the existence of routing equipment at certain sites is not the sole determining factor for any disaggregated configuration. Rather, the location of a

disaggregated HSA POI is uniquely based on space and power requirements for TPIA specific facilities, the capacity to construct outside meet-me points, and the characteristics of the demand for TPIA in the region.

78. In response to RCCI, CNOC submitted that the information mentioned above forms part of a data set that is necessary for engaging in a meaningful assessment of proposed disaggregated HSA service configurations and should be disclosed on that basis.
79. Shaw submitted that it has updated its abridged filing to specify, along with the site identifier information, whether each site is a hub or core site.
80. Videotron submitted that it has disclosed on the public record a list of all its sites, indicating in each case whether the site is proposed as a POI or not and, if not, which site it will be served from. Videotron further submitted that, with the disclosure of this information, its wholesale customers should be able to identify the POIs of interest and calculate the effort required to reach those POIs.
81. Videotron submitted that the details of the transport network that connects these POIs in the background is not relevant information for its wholesale customers and must remain confidential in order to avoid unnecessarily disclosing elements of Videotron's cost structure.

Commission's analysis and recommendations

Public interest

82. The Commission considers that this information may assist parties in identifying which COs or sites can support wholesale HSA services and which cannot. However, the availability of routing equipment is not the sole criteria for selecting a CO or site to be a disaggregated POI. As submitted by RCCI, there are other factors that need to be taken into account.

Specific direct harm to the wholesale service providers

83. The Commission considers that the disclosure of this information will provide an extensive amount of detail on the public record about the network architecture of wholesale service providers and locations of strategic aggregation points, which would pose a threat to network security.
84. The Commission is also of the view that the disclosure of this information would allow competitors to obtain detailed information on wholesale service provider networks and could enable competitors to implement business strategies that could cause specific direct harm to the wholesale service providers.

Weighing the public interest versus the specific direct harm to the wholesale service providers

85. The Commission is of the view that, though this information may assist parties in assessing the proposed disaggregated configurations to a certain degree, it is not required for interveners to meaningfully participate in the proceeding. The Commission considers that information such as the exact site location, which it directed wholesale service providers to make available in paragraph 52, subject to NDAs, and the number of homes passed per site, which CNOC and other parties to the proceeding are able to reasonably estimate using publicly available information, represents more important and relevant information than the list of sites with routing equipment.
86. The Commission considers that the disclosure of this information on the public record would likely cause specific direct harm to the wholesale network providers, due to network security, as well as competitive harm. These harms outweigh the benefits of publicly disclosing this information.
87. With respect to CNOC's submission that the sites with routing equipment will ultimately be disclosed to wholesale customers, the Commission is of the view that it is very likely that only some of the sites with routing equipment will ultimately be designated as disaggregated POIs and disclosed to wholesale customers. There will very likely be some sites with routing equipment that will not be designated as disaggregated POIs and thus information regarding these sites will not necessarily be ultimately disclosed. Therefore, the Commission is of the view that these sites should not be disclosed through the proceeding.
88. Accordingly, the Commission determines that the responses to question 2.f. not be disclosed on the public record.

Question 3.c. for ILECs and cable carriers: The number of premises passed by HSA facilities that are capable of receiving HSA services, along with a breakdown by technology

89. CNOC submitted that the information requested is vital to determining the addressable market that is served over each technology and critical to an assessment of proposed disaggregated configurations, including an assessment of appropriate levels of disaggregation.
90. CNOC submitted that, at this high-level of aggregation, there is simply no competitive benefit to be gained from this information, which is otherwise highly relevant to the matters under examination in the proceeding.
91. CNOC submitted that forecast data will allow competitors to assess whether proposed disaggregated service configurations will allow wholesale customers to serve adequate addressable markets in the coming years. CNOC further submitted that, without this information, parties will not be able to discern whether there is any

potential for a viable business case for the efficient deployment of disaggregated HSA service to specific COs or sites.

92. CNOC submitted that the considerable public interest in favour of disclosure exceeds any perceived specific direct harm resulting from disclosure.
93. Bell Canada, Cogeco, Eastlink, RCCI, and TCI submitted that the number of high-speed capable subscribers currently served and forecasted to be served by each technology per province is highly sensitive network information, which they consistently treat as confidential and the disclosure of which would cause specific direct harm to them.
94. Bell Canada and Cogeco further submitted that this information would provide specific insight into their strategic investment plans and would enable their competitors to develop more effective business strategies that could prejudice their competitive position, resulting in specific direct harm.
95. Cogeco submitted that its financial statements disclose the number of homes passed in total, without a breakdown by technology, on a company-consolidated basis. It also noted that it does not release a breakdown of this information by province.
96. Shaw submitted that this information is highly disaggregated data about its addressable subscriber base. Shaw further submitted that it expends significant resources to collect and maintain this information, making it valuable proprietary commercial material. Disclosure of this information on the public record would give Shaw's direct competitors insight into the precise contours of its hybrid fibre-coaxial and fibre-to-the-premise serving footprints, which could be used by these competitors to enhance their network and marketing strategies, to Shaw's detriment.
97. Shaw submitted that, if the Commission were to mandate the disclosure of this information, Shaw should only be required to make it available to its TPIA customers, upon request and under the non-disclosure provisions it has in place with each of them.
98. Videotron submitted that it already disclosed the total number of premises passed, without a breakdown by technology, that are capable of receiving HSA services as of 31 December 2019. However, Videotron submitted that the 2020 and 2021 forecasts represent highly strategic information and should not be disclosed.

Commission's analysis and determinations

Public interest

99. The Commission considers that the aggregated information on premises passed by HSA facilities or the aggregate number of premises passed broken down by access technology deployed would be of minimal assistance to parties in their assessment of disaggregated configurations. The assessment of disaggregated configurations deals with how individual COs or sites might be grouped together and how such groupings

change the addressable market. This assessment relies on information about premises passed per individual CO or site rather than information on the total premises passed per province, by technology.

Specific direct harm to the wholesale service providers

100. The Commission considers that the existing and forecasted total number of high-speed capable premises passed per province, along with the associated breakdown by technology, is sensitive network information which the wholesale service providers consistently treat as confidential.

101. The Commission is of the view that disclosure of this information, especially the forecast information, even under an NDA, would disclose the strategic investment plans of wholesale service providers, allowing competitors to develop more effective business and marketing strategies and resulting in specific direct harm to wholesale service providers.

Weighing the public interest versus the specific direct harm to the wholesale service providers

102. Videotron disclosed the total number of premises passed that are capable of receiving HSA services as of 31 December 2019. However, Videotron provided only the total number of premises, without a breakdown by technology and without a forecast. In addition, Videotron disclosed this information for its overall network, and not broken down by province.

103. As mentioned in the analysis section for questions 2.g. and 2.h., in its intervention dated 5 October 2020, CNOC demonstrated that one can reasonably estimate the premises served per CO or site location based on Statistics Canada census data matched to each CO or site location. If the information on the total premises passed per province is required by CNOC for its assessment of disaggregated configurations, the aforementioned estimated premises served per CO or site in each province could be used to develop such an estimate.

104. Accordingly, the Commission is of the view that CNOC and the competitors have the ability to reasonably estimate the number of premises passed per CO or site using publicly available information. This allows them to participate effectively in the proceeding without having the specific information provided in this response.

105. Therefore, disclosure of this information to competitors would likely lead to specific harm to wholesale service providers, which would not be outweighed by the public interest. Thus, it would not be appropriate to place the exact number of premises passed per province, along with the associated breakdown by technology, on the public record or to order the disclosure of this information via NDAs.

106. Accordingly, the Commission determines that the responses to question 3.c. not be disclosed on the public record.

Question 2.g. for ILECs: The number of local wireline network access services (NAS) served by each CO

107. CNOC submitted that the information requested is vital to determining the addressable market served by each CO. This information is critical to an assessment of proposed disaggregated configurations, including an assessment of appropriate levels of disaggregation. Without this information, parties will not be able to discern whether there is any potential for a viable business case for the efficient deployment of disaggregated HSA service to specific COs.
108. CNOC submitted that access to this information will allow interested parties to submit comments with a view to facilitating entry into the market and fostering competition, but will also allow competitors to cause minimal disruption and changes to the wholesale HSA service providers' network and to minimize deployment timelines and costs. Disclosure is therefore consistent with the objectives of the Notice.
109. Bell Canada, SaskTel, and TCI submitted that they opposed the public disclosure of the information since it would provide existing or potential competitors with competitively sensitive information which would not otherwise be available. This situation could prejudice their competitive position, resulting in financial loss.
110. Bell Canada submitted that parties do not need to know the number of voice lines it serves at each CO. The NAS³ will not provide a reliable indication as to the addressable HSA market, since Bell Canada does not provide voice services to all premises covered by a CO's geographic serving area and, in some cases, provides voice service to end-users that are not eligible for HSA service.
111. SaskTel submitted that disclosing this information would not allow competitors to determine the addressable market served by each CO.
112. TCI submitted that the number of NAS by site would provide competitors with detailed insight into the distribution of TCI's services and allow them to implement targeted strategies designed to cause maximum harm to TCI.
113. CNOC replied that, unlike the information filed with the Commission in response to questions 2.h. and 3.c., in which the number of homes passed per site or per province was requested, a response to question 2.g. provides an indication of premises that are actually connected to ILECs' networks for the provision of voice services, as opposed to premises that are simply passed by the network.

³ NAS connect residences or businesses to ILECs' telephone networks. A residence or business telephone service (i.e. voice line) is connected via twisted-pair copper wire (i.e. the local loop) to the ILEC's CO where telephony switches connect calls between users. Internet users can connect to the Internet over the same local loop.

114. CNOC further submitted that there could be barriers to connecting premises that are passed as opposed to connected. A NAS represents a premise that is actually connected to the ILECs' network for the provision of voice services. Accordingly, access to information that was filed in response to questions 2.g., 2.h., and 3.c. would allow parties to put together a more complete picture of addressable markets on a per-CO basis.

Commission's analysis and determinations

Public interest

115. The Commission considers that the number of local wireline NAS served by each CO may assist parties in assessing the proposed disaggregated configurations. However, this information does not provide a reliable indication as to the addressable HSA market, which limits the usefulness of this information with respect to participation in the proceeding.

116. With respect to potential barriers to connecting premises that are passed as opposed to connected, CNOC has not provided any explicit examples of those potential barriers. It is also unclear to the Commission what the potential barriers referenced by CNOC might be.

Specific direct harm to the wholesale service providers

117. The Commission considers that the disclosure on the public record of the number of NAS by site could provide competitors with insight into the distribution of wholesale service providers' voice services and allow them to develop strategies that would result in specific direct harm to the wholesale service providers in the voice market.

Weighing the public interest versus the specific direct harm to the wholesale service providers

118. The Commission considers that the requested information contains sensitive disaggregated information that has consistently been kept confidential in prior proceedings. If disclosed, competitors could use the information to develop specific marketing strategies that could harm the wholesale service providers' competitive positions and market shares.

119. Further, the Commission considers that this information does not provide a reliable indication as to the addressable HSA market.

120. The Commission is of the view that disclosure of this information on the public record or even under an NDA could result in specific direct harm to the wholesale service providers. This harm outweighs the public interest in disclosure.

121. Accordingly, the Commission determines that the responses to questions 2.g. not be disclosed on the public record.

Questions 2.d. and 2.e. for cable carriers: The number of cable modem terminating systems (CMTS)/converged cable access platforms (CCAP)⁴ at each site

122. CNOC submitted that the total number of CMTS or CCAP would allow for an estimate of HSA end-users served from each site. Such assessments are valuable to the matters that are under consideration in the proceeding.
123. CNOC submitted that since certain POIs are already equipped with a number of CMTS or CCAP in order to accommodate multiple service providers, this information would constitute a relevant consideration to the establishment of an appropriate disaggregated service configuration.
124. Videotron submitted that the parties do not need to know the number of CMTS or CCAP in a site to assess the proposed disaggregated configurations.
125. Videotron further submitted that the disclosure of this confidential information would allow its competitors to better understand its cost structure, which would allow them to develop business strategies likely to cause serious and direct harm to Videotron.
126. Shaw submitted that the number of CMTS or CCAP devices at a site is a reflection of the number of subscribers served at each site, which is sensitive commercial information and is not required by CNOC and others to fully participate in the proceeding.
127. Cogeco, Eastlink, RCCI, Shaw, and Videotron submitted that the information related to the number of CMTS or CCAP at each site provides no value to CNOC or wholesale customers in assessing any proposed disaggregated HSA configuration.
128. RCCI further submitted that, if an intervener knows that a site location has 20 CMTS or CCAP and that such a facility can serve a given number of end-users, then it is relatively straightforward to estimate the number of end-users served from that site location.
129. RCCI further submitted that the resulting estimate of subscribers for each site is highly disaggregated information and its disclosure on the public record would provide existing and potential competitors with sensitive information that may cause specific direct harm to RCCI.
130. In response, CNOC submitted that the cable carriers do not explain why they would be subject to harm other than vaguely claiming, without any justification, that disclosure would provide competitors with information about their cost structure, which would allow competitors to develop retail strategies.

⁴ CMTS and CCAP are equipment, typically located in a cable company's site, which are used to provide high-speed data services, such as cable Internet or voice over Internet Protocol, to retail and wholesale end-users.

Commission's analysis and determinations

Public interest

131. The Commission considers that knowledge of the number of CMTS or CCAP devices per site may assist interveners in their assessment of proposed disaggregated configurations, since the number of CMTS or CCAP devices per site may be related first to the total number of retail end-users being served by the site, and then, using market penetration assumptions, to the size of the potential addressable market in the serving area.

Specific direct harm to the wholesale service providers

132. In the Commission's view, the disclosure of this information may provide sensitive information on the cable carriers' cost structure that may cause specific direct harm to cable carriers.

133. If a party knows the number of CMTS or CCAP at a site, a competitor may be able to develop an estimate for the total number of retail end-users per site and develop specific marketing strategies that could harm the cable carriers' competitive position and market share. Therefore, the Commission is of the view that the number of CMTS or CCAP devices per site is highly sensitive information that may cause specific direct competitive harm to cable carriers if disclosed.

Weighing the public interest versus the specific direct harm to the wholesale service providers

134. The requested information is sensitive disaggregated information that has consistently been kept confidential. Competitors could use this information to develop specific marketing strategies that could harm the cable carriers' competitive positions and market shares. Further, disclosure of this information may provide sensitive information on the cable carriers' cost structures that may cause specific direct harm to cable carriers.

135. In the Commission's view, the site location information filed in response to questions 2.b, 2.c, and 2.d, which the Commission is directing wholesale service providers to disclose, and the publicly available census information are sufficient for wholesale customers to reasonably estimate the number of premises served per site location and the size of the potential addressable market in a serving area. As a result, reasonable estimates can be calculated without the need for the specific confidential information provided in answer to questions 2.d. and 2.e.

136. Therefore, the Commission is of the view that the specific direct harm to wholesale service providers likely resulting from the disclosure of this information outweighs the public interest in its disclosure.

137. Accordingly, the Commission determines that the responses to questions 2.d. and 2.e. not be disclosed on the public record.

Questions 1.a., 1.b., and 2.a.: The total number of sites with CMTS/CCAP, the total number of sites capable of providing HSA services, the name of each site – Cogeco

138. The Commission notes that Eastlink, RCCI, Shaw, and Videotron disclosed the information requested.
139. CNOC submitted that Cogeco has expressed a willingness to disclose this information on the public record, although it will not do so without a Commission order.
140. Cogeco submitted that it will disclose its responses to questions 1.a., 1.b., and 2.a. on the public record.

Commission's analysis and determinations

141. Eastlink, RCCI, Shaw, and Videotron have already disclosed this information on the public record and Cogeco has proposed to disclose this information.
142. Accordingly, the Commission **directs** Cogeco to disclose its responses to questions 1.a., 1.b., and 2.a. on the public record.

Conclusion

143. The Commission **directs** wholesale service providers to make available by **1 September 2021**, upon request and under agreed-upon non-disclosure provisions, the locations of ILEC COs and cable carrier sites to wholesale customers who are registered with the Commission as telecommunications service providers and interveners in the proceeding, regardless of whether they are currently customers of the wholesale service providers, as well as to CNOC and the BCBA as the representatives of certain wholesale customers. The Commission also **directs** Cogeco to disclose the responses to questions 1.a., 1.b., and 2.a. on the public record.

Policy Directions

144. In compliance with paragraph 1(b)(i) of the 2006 Policy Direction⁵, approval of this application advances section 7(f) of the Telecommunications Act.⁶
145. Further, the 2019 Policy Direction states that the CRTC should consider how its decisions can promote competition, affordability, consumer interests, and innovation. The Commission has reviewed the disclosure request in light of the 2019 Policy

⁵ *Order Issuing a Direction to the CRTC on Implementing the Canadian Telecommunications Policy Objectives*, SOR/2006-355, 14 December 2006

⁶ The cited policy objective is: 7(f) to foster increased reliance on market forces for the provision of telecommunications services and to ensure that regulation, where required, is efficient and effective.

Direction and considers that its directions regarding disclosure set out in this decision are compliant with the 2019 Policy Direction, because they will positively impact competition by (i) allowing CNOC and wholesale customers access to location data for COs and sites, which will provide them with information needed to effectively participate in the proceeding and contribute to a more fulsome record; and (ii) maintaining confidentiality of competitively sensitive information where the public interest does not outweigh the specific direct harm of disclosure.

Secretary General

Related documents

- *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
- *Application to allow Bell Canada and its affiliates to block certain fraudulent voice calls on a trial basis – Requests for disclosure of information filed in confidence and motion for a non-disclosure agreement*, Compliance and Enforcement and Telecom Decision CRTC 2020-7, 17 January 2020
- *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
- *Confidentiality of information used to establish wholesale service rates*, Telecom Regulatory Policy CRTC 2012-592, 26 October 2012
- *Procedures for filing confidential information and requesting its disclosure in Commission proceedings*, Broadcasting and Telecom Information Bulletin CRTC 2010-961, 23 December 2010