



Telecom Regulatory Policy CRTC 2015-177

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Regulatory framework for wholesale mobile wireless services

Canadians are increasingly relying on mobile wireless services as their primary means of communication. There are more than 28 million mobile wireless service subscribers in Canada who rely on the voice, text, and data services available on their wireless devices for their communications needs. In order to provide mobile wireless services to their retail customers, wireless service providers enter into a wide variety of wholesale mobile wireless arrangements.

The Commission's determinations in this decision are the result of a public proceeding that included a public hearing held in Gatineau, Quebec. As part of this proceeding, the Commission reviewed key elements of the retail mobile wireless market to determine (i) if an examination of the wholesale mobile wireless market is warranted, and (ii) whether greater regulatory oversight would be appropriate in the wholesale mobile wireless market.

In February 2014, an amendment to the Telecommunications Act (the Act) was introduced in Parliament to cap domestic wholesale mobile wireless roaming rates (wholesale roaming caps). This amendment (section 27.1), which came into effect in June 2014, also stated that an amount established by the Commission for wholesale mobile wireless roaming (wholesale roaming) would prevail over the wholesale roaming caps.

*The Commission **determines** that it is necessary to regulate the rates that Bell Mobility, RCP, and TCC charge other Canadian wireless carriers for domestic Global System for Mobile communications (GSM)-based wholesale roaming, primarily in light of its finding that wholesale roaming is not subject to a sufficient level of competition. The Commission **directs** Bell Mobility, RCP, and TCC to each file proposed tariffs for wholesale roaming. Pending its final determination on proposed tariffs, the Commission has established interim rates for wholesale roaming. The amounts established by the Commission for these tariffs prevail over the wholesale roaming caps set out in section 27.1 of the Act for these companies.*

In light of the Commission's determination on wholesale roaming rates in this proceeding, the Commission recommends that section 27.1 of the Act be repealed to allow the return to market forces for the provision of all other wholesale roaming as soon as possible.

The Commission's determinations in this decision will facilitate sustainable competition that provides benefits to Canadians, such as reasonable prices and innovative services, as well as continued innovation and investment in high-quality mobile wireless networks.

A concurring opinion by Vice-Chairman Peter Menzies is attached to this decision.

Introduction

1. The mobile wireless market is the largest and fastest-growing sector in the Canadian telecommunications industry. In 2013, mobile wireless services in Canada generated revenues of \$21.2 billion, which accounted for nearly half of the total telecommunications revenues in this country.¹ The retail market for wireless services offers Canadians a variety of wireless devices, plans, and packages. There are more than 28 million mobile wireless service subscribers in Canada who rely on the voice, text, and data services available on their wireless devices for their communications needs.
2. A mobile wireless carrier (wireless carrier) requires spectrum² and a mobile wireless network to provide mobile wireless services. Spectrum is licensed by Industry Canada under the *Radiocommunication Act*. Licensees, including wireless carriers, are subject to conditions of licence under which, for example, licensees are required to provide certain wholesale mobile wireless services to other wireless carriers.³ If licensees are unable to conclude arrangements with respect to these services, they have recourse to arbitration in accordance with *Industry Canada's Arbitration Rules and Procedures*.⁴
3. Since the mid-1990s, the Commission has forborne from regulating mobile wireless services, except with respect to its powers under section 24 and subsections 27(2), 27(3), and 27(4) of the *Telecommunications Act* (the Act). As a result of forbearance, wireless carriers are, among other things, not required to obtain prior Commission approval of the rates, terms, and conditions for their mobile wireless services, including wholesale mobile wireless services. However, the Commission has retained the power to impose conditions on the offer and provision of mobile wireless services, and to make findings of unjust discrimination or undue preference.

Background

4. In mid-2013, Commission staff undertook a fact-finding exercise to assess the impact of wholesale mobile wireless roaming (wholesale roaming) arrangements⁵ on

¹ Based on information in the Commission's 2014 *Communications Monitoring Report*

² Spectrum is the medium over which all wireless signals are transmitted.

³ [Conditions of Licence for Mandatory Roaming and Antenna Tower and Site Sharing and to Prohibit Exclusive Site Arrangements](#) (CPC-2-0-17 Issue 2, March 2013)

⁴ [Industry Canada's Arbitration Rules and Procedures](#) (CPC-2-0-18 Issue 2, March 2013)

⁵ Wireless carriers enter into wholesale roaming arrangements to allow their customers to originate or terminate communications when they are outside their own carrier's network footprint.

the competitiveness of the Canadian wireless industry and the choices available to Canadians. Based on the information obtained through this exercise, the Commission considered that disparities in wholesale roaming rates, terms, and conditions, in particular between certain large Canadian wireless carriers and other Canadian wireless carriers, gave rise to concerns that some Canadian wireless carriers may be subject to unjust discrimination or undue preference, contrary to subsection 27(2) of the Act.

5. On 12 December 2013, the Commission issued Telecom Notice of Consultation 2013-685 to consider whether or not, as a question of fact, there was a situation of unjust discrimination or undue preference with respect to wholesale roaming arrangements in Canada. In addition, the Commission stated its intention to initiate a separate proceeding to further examine the wholesale mobile wireless market (wholesale market).
6. On 18 December 2013, the Minister of Industry announced that the Government of Canada planned to introduce an amendment to the Act that would cap domestic wholesale roaming rates and stated that this measure would be in place until the Commission made a decision on wholesale roaming rates.
7. On 11 February 2014, the Government of Canada introduced in Parliament *An Act to implement certain provisions of the budget tabled in Parliament on February 11, 2014 and other measures* (Bill C-31). Bill C-31 included a proposed amendment to the Act (i.e. the introduction of section 27.1) to establish caps to prevent Canadian wireless carriers from charging other Canadian wireless carriers more than they charge their own retail customers for voice, text, and data services (wholesale roaming caps). The proposed amendment also stated that an amount established by the Commission for wholesale roaming would prevail over the wholesale roaming caps. Furthermore, Bill C-31 proposed that the Governor in Council have the power to repeal section 27.1 of the Act by an Order in Council. Bill C-31 received royal assent and came into force on 19 June 2014.⁶

Telecom Notice of Consultation 2014-76

8. On 20 February 2014, in Telecom Notice of Consultation 2014-76, the Commission initiated a proceeding to determine whether the wholesale market is sufficiently competitive and, if not, what regulatory measures are required.
9. The Commission stated that it would also consider whether greater regulatory oversight, including mandating access to any existing or potential wholesale mobile wireless service, would be appropriate if it were to find that the wholesale market was not sufficiently competitive. The Commission also stated that, in the event of such a finding, it would consider whether its existing powers under the Act were sufficient or whether it should reassert its jurisdiction to apply certain forborne

⁶ *Economic Action Plan 2014 Act, No. 1*, S.C. 2014, c. 20

provisions of the Act, in order to impose regulatory measures on wireless carriers with respect to wholesale mobile wireless services.

Telecom Decision 2014-398

10. On 31 July 2014, the Commission issued Telecom Decision 2014-398, in which it found that, contrary to subsection 27(2) of the Act, there were clear instances of unjust discrimination and undue preference by Rogers Communications Partnership (RCP) with respect to (i) the imposition of exclusivity clauses in its wholesale roaming arrangements with certain other wireless carriers, and (ii) the wholesale roaming rates it charged those carriers. Consequently, the Commission prohibited exclusivity provisions in agreements between Canadian wireless carriers for wholesale roaming in Canada. The Commission considered that section 27.1 of the Act mitigated the risk of future unjust discrimination with respect to wholesale roaming rates and, therefore, did not put in place a remedy in this regard.
11. Further, the Commission noted that there were claims of unjust discrimination or undue preference with respect to other terms and conditions in wholesale roaming arrangements, such as seamless roaming.⁷ Several parties also suggested regulating wholesale roaming rates. The Commission stated that it would be more appropriate to address these issues in the present proceeding.

The proceeding

12. Parties that participated in the proceeding included Bell Mobility Inc. (Bell Mobility), RCP, and TELUS Communications Company (TCC) [collectively, the national wireless carriers]; MTS Inc. (MTS), Saskatchewan Telecommunications (SaskTel), and TBayTel (collectively, the regional wireless carriers); Bragg Communications Incorporated, operating as Eastlink (Eastlink), Data & Audio Visual Enterprises Wireless Inc., operating as Mobilicity, Globalive Wireless Management Corp., operating as WIND Mobile (WIND), and Quebecor Media Inc., on behalf of its affiliate Videotron G.P. (Videotron) [collectively, the new entrants]; the Public Interest Advocacy Centre, the Consumers' Association of Canada, the Council of Senior Citizens' Organizations of British Columbia, and the National Pensioners Federation (collectively, PIAC et al.); OpenMedia.ca; l'Union des consommateurs (l'Union); Alcatel-Lucent Canada Inc.; the Canadian Cable Systems Alliance Inc. (CCSA); the Canadian Network Operators Consortium Inc. (CNOC); Cisco Systems Canada; Cogeco Cable Inc. (Cogeco); Fibernetics Corporation; GLENTEL Inc.; Lycamobile Ltd. (Lycamobile); Lynx Mobility Inc.; Mobilexchange Ltd. (Mobilexchange); Nokia Solutions and Technology; Orange Horizons (Orange); Primal Technologies Inc.; Raven Wireless (Raven); SSi Micro Ltd. (SSi); Tucows Inc. (Tucows); Vaxination Informatique (Vaxination); Roslyn Layton; Ben Klass and David Ellis (collectively, Klass/Ellis); the Commissioner of Competition (the

⁷ Seamless roaming provides for the uninterrupted flow of a voice call or data session as the customer actively moves from the network coverage of his or her home network to the network coverage of a host network or vice versa.

Bureau); the Government of the Northwest Territories; the Province of British Columbia; the Village of Sayward; and four individuals.

13. The proceeding included a public hearing, which began on 29 September 2014. The public record of this proceeding, which closed on 20 October 2014,⁸ is available on the Commission's website at www.crtc.gc.ca or by using the file numbers provided above.

Objectives of the decision

14. Canadians are increasingly relying on mobile wireless services as their primary means of communication. These services constitute the largest component of Canadians' spending on telecommunications services.⁹ As stated earlier, mobile wireless services make up nearly half of all telecommunications revenues, which is an indication of their importance to the Canadian economy. Competition in the wireless industry benefits society and the economy by providing innovative communications services at reasonable prices.
15. In order to provide mobile wireless services to their retail customers, wireless service providers¹⁰ enter into a variety of wholesale mobile wireless arrangements that address commercial and technical matters, such as roaming, and tower and site sharing.¹¹ The rates, terms, and conditions under which many wireless service providers are able to obtain these wholesale services are critical to their ability to offer competitive retail services.
16. The Commission's determinations in this proceeding, which take into consideration the policy objectives set out in section 7 of the Act, as well as the Policy Direction,¹² were made with a view to achieving the following objectives with respect to the mobile wireless services market:
 - continued innovation and investment in high-quality telecommunications facilities;
 - sustainable competition that provides benefits, such as reasonable prices and innovative services, to Canadians; and
 - implementing efficient regulatory measures with respect to wholesale mobile wireless services, along with continued reliance on market forces where appropriate.

⁸ Wireless carriers continued to file, after 20 October 2014, wholesale mobile wireless agreements, which also formed part of the record of this proceeding.

⁹ Based on information in the Commission's 2014 *Communications Monitoring Report*

¹⁰ Wireless service providers include wireless carriers and resellers that provide mobile wireless services.

¹¹ "Tower and site sharing" refers to arrangements that allow wireless carriers to install their equipment on towers and/or sites owned by other wireless carriers.

¹² *Order Issuing a Direction to the CRTC on Implementing the Canadian Telecommunications Policy Objectives*, P.C. 2006-1534, 14 December 2006

Approach

17. The record of this proceeding contains a number of different comments with respect to how the Commission should assess mobile wireless markets and the tests that should be used to determine whether intervention is required in the wholesale market.
18. The national wireless carriers generally submitted that regulation of wholesale mobile wireless services is only necessary if there is a market power problem in the retail mobile wireless market (retail market) and that, therefore, the retail market should be examined first.
19. RCP and PIAC et al. submitted that the Commission should apply the essential services test¹³ set out in Telecom Decision 2008-17 to assess the wholesale market.
20. The new entrants generally submitted that the Commission's decision to intervene in the wholesale market should not depend upon a finding of market failure in the retail market. Eastlink and WIND submitted that the Commission should intervene in the wholesale market following a finding of market power, based on the factors outlined in Telecom Decision 94-19,¹⁴ in the relevant wholesale market.
21. The Bureau submitted that it is important to consider the competitiveness of the retail market in Canada when assessing the competitiveness of the wholesale market.

Commission's analysis and determinations

22. In Telecom Notice of Consultation 2014-76, the Commission set out a proposed approach to review the wholesale market, which included an examination of the relevant product and geographic markets for wholesale mobile wireless services as part of its assessment of market power. The Commission further stated that it would examine supply and demand for wholesale mobile wireless services in their defined markets and identify trends (at the retail and wholesale levels) that could influence future supply and demand. The Commission also stated that it would review the impact that the wholesale market has on the development of the downstream retail market, and the effect on sustainable competition in the retail market.
23. The Commission considers that the objective of any regulatory intervention in the wholesale market should be to ensure sustainable competition in the retail market that provides benefits to Canadians, such as reasonable prices and innovative services. Therefore, the Commission considers that a decision to conduct an examination of the wholesale market should take place only if an assessment of the retail market reveals concerns with the sustainability of competition in that market. Accordingly, in this decision, the Commission reviews the key elements of the retail market to determine if an examination of the wholesale market is warranted.

¹³ Refer to paragraph 99 of this decision for a description of the essential services test.

¹⁴ Refer to paragraph 55 of this decision for a description of the market power framework.

24. The proposed approach set out in Telecom Notice of Consultation 2014-76 to examine the wholesale market contained key elements of the essential services test set out in Telecom Decision 2008-17, including consideration of market power and its impact on the downstream retail market. Therefore, the Commission **determines** that the essential services test is the appropriate test to apply if an assessment of the retail market demonstrates that an examination of the wholesale market is warranted. The essential services test, along with policy considerations, informs the Commission's decision whether to mandate a particular wholesale mobile wireless service.

Assessment of the retail mobile wireless market

25. The national wireless carriers submitted that the retail market has repeatedly been found to be competitive. Bell Mobility and RCP argued that there are at least three, and in most cases four, strong competitors across the country, except in the North. Bell Mobility submitted that while RCP is the largest firm and has a market share of 34%, there is no dominant wireless carrier in Canada. Bell Mobility and RCP argued that intense advertising and promotional activities by wireless carriers, improvements in customer service, and price competition provide evidence of extensive rivalrous behaviour. TCC submitted that Canadians benefit from a retail market that offers low prices, a range of wireless service providers, and excellent network services.
26. The new entrants submitted that the national wireless carriers possess market power in the retail market. They added that the market power exercised by the national wireless carriers in the wholesale market for various services enables these carriers to maintain their retail market power, and could have serious adverse impacts on the sustainability of retail competition. For example, WIND submitted that the lack of price competition, particularly in the high-value post-paid smartphone market segment, is evidence that the national wireless carriers' use of wholesale pricing and restrictions has effectively curtailed competition in the retail market.
27. Eastlink submitted that retail price declines in many areas since 2008 are directly attributable to the presence of the new entrants. The company also submitted, however, that the continued survival of the new entrants hinges on access to wholesale inputs at reasonable rates, terms, and conditions.
28. The Bureau submitted that the national wireless carriers possess market power in the retail market in Canada. It added that this market is characterized by above-normal profits and comparatively low service-penetration levels, both of which are direct indicators of market power.
29. The Bureau submitted that there are credible scenarios in which a vertically integrated wireless carrier would have the incentive and ability to raise its wholesale price to rival carriers, so as to increase downstream rivals' input costs and resulting downstream prices. The Bureau submitted that it is important to examine the

wholesale market to directly address, and ideally remove, the national wireless carriers' incentive to engage in vertical foreclosure.¹⁵

30. CNOC submitted that the state of retail mobile wireless competition in Canada is tenuous, and that the introduction of new players, by means of a complementary wholesale market, will strengthen the market and discipline the market power of the national wireless carriers. It stated that new entrants face several barriers to entry in offering retail mobile wireless services, including access to spectrum; access to commercially reasonable wholesale roaming rates; and timely, fair, and affordable access to towers.
31. Cogeco submitted that Canada's mobile wireless market is characterized by an excessive concentration of market power in the hands of the national wireless carriers, which have used their combined power to lessen and even foreclose competition in the downstream retail market from both smaller wireless carriers and mobile virtual network operators (MVNOs).¹⁶
32. PIAC et al. submitted that, despite the Government of Canada's efforts to introduce greater choice for retail customers, most new entrants have been driven out of the marketplace, or are now seriously threatened. L'Union submitted that even though competition is not completely absent from the retail market, it occurs primarily between the national wireless carriers, which dominate that market.

Commission's analysis and determinations

Retail market

33. In all ten provinces, almost all consumers have a choice of at least three wireless service providers.¹⁷ The Commission considers that switching wireless service providers has become easier following the introduction of the Wireless Code,¹⁸ which, among other things, allows customers to unlock their devices and limits cancellation fees.
34. Further, the Commission considers that there are examples of advertising and promotional activities on the record of this proceeding that demonstrate rivalrous behaviour between wireless carriers in the retail market. The Commission considers that the presence of smaller wireless carriers, including the new entrants, has

¹⁵ According to the Bureau, vertical foreclosure can be either partial (i.e. setting input prices [or engaging in other behaviour] that reflect incentives to increase downstream rivals' input costs to limit downstream competition) or full (i.e. setting input prices sufficiently high that entry by downstream rivals is pre-empted or exit is induced).

¹⁶ An MVNO is a wireless service provider that does not own spectrum or operate its own radio access network (RAN); instead, it relies on the spectrum and RAN of a wireless carrier and, in some cases, other facilities and/or services, to provide mobile wireless services to consumers.

¹⁷ Until recently, most consumers in the three territories had access to only one wireless service provider; however, entry by two wireless service providers has increased consumer choice for Northern consumers.

¹⁸ The Wireless Code was introduced in Telecom Regulatory Policy 2013-271.

contributed to the overall competitiveness of the retail wireless market in many regions in Canada.

35. However, at the national level, there has been very little change in retail market shares (either by revenue or by number of subscribers) in Canada in the past five years, despite entry into the market by several wireless carriers. While no company has a national revenue market share greater than 35%, the national wireless carriers collectively continue to have national market shares of more than 90% for both revenues and numbers of subscribers.
36. The Commission considers that the barriers to entry into the retail market are very high. These barriers include not only access to spectrum, and the high cost of spectrum and of investment in facilities, but also the ability of wireless service providers to obtain wholesale mobile wireless services from other wireless carriers, in particular the national wireless carriers, at reasonable rates, terms, and conditions.
37. The Commission considers that the prohibition of exclusivity clauses, set out in Telecom Decision 2014-398, and the wholesale roaming caps have provided some relief to smaller wireless carriers with respect to their wholesale arrangements with the national wireless carriers. However, the Commission notes that smaller wireless carriers, including the new entrants, have indicated that they still encounter difficulties in obtaining access to wholesale mobile wireless services at reasonable rates, terms, and conditions from other wireless carriers, in particular the national wireless carriers.
38. The Commission considers that, if wireless service providers are unable to obtain wholesale mobile wireless services at reasonable rates, terms, and conditions from other wireless carriers, its objectives set out earlier in this decision would likely not be attainable.
39. In light of the above, the Commission finds it appropriate to examine wholesale mobile wireless services to determine, as set out in this decision, whether regulatory intervention is required.

Examination of wholesale mobile wireless services

40. As stated earlier, a wireless carrier requires spectrum and a mobile wireless network to provide mobile wireless services. A mobile wireless network typically consists of a radio access network (RAN), which includes equipment such as towers and antennas; a core network, which includes equipment such as switches and routers; backhaul, which connects the RAN and the core network; billing and operational support systems; interconnections to other networks; and an interconnection to the Internet. Wireless service providers negotiate wholesale arrangements with each other for the provision of various wholesale services.

41. In this decision, the Commission will examine three types of wholesale mobile wireless services: (i) roaming, (ii) MVNO access, and (iii) tower and site sharing.¹⁹
42. Wholesale roaming enables the retail customers of a wireless carrier (i.e. the home network carrier) to automatically access voice, text, and data services by using a visited wireless carrier's network (also referred to as "the host network"), including the RAN, when they travel outside their home carrier's network footprint.
43. MVNOs also rely on some or all components of a wireless carrier's network, including the RAN, to provide retail services. An MVNO that supplies most of the components of a network apart from the RAN is referred to in this decision as a "full MVNO." Branded resellers provide marketing services, distribution channels, and billing services, but rely on wireless carriers for the rest of their business, including the operation of the network. While MVNO models vary, they all require access to the RAN of a wireless carrier.
44. Tower- and site-sharing arrangements enable a wireless carrier to install wireless equipment²⁰ on other wireless carriers' towers or sites in areas where it holds spectrum licences. These arrangements enable the wireless carrier to deploy its network in a cost-effective and efficient manner, and minimize the number of towers in communities.
45. While there may be similarities between the network access required by a wireless service provider from a host network to enable either wholesale roaming or MVNOs, the services provided by the host network differ from each other. Wholesale roaming provides incidental access to the host network by the customers of a wireless carrier when these customers are outside their home network's footprint. In contrast, wholesale MVNO access provides an MVNO's customers with permanent access to the host network. The Commission's examination of wholesale roaming and MVNO access will take into account these similarities and differences as appropriate.

¹⁹ The Commission's examination regarding whether regulatory intervention is required did not include other wholesale arrangements, including network-sharing arrangements. Network-sharing arrangements typically enable two or more carriers to join together or coordinate to build and/or operate a network. These arrangements are complex, and the terms and conditions can vary depending on whether any network components are shared, whether spectrum is included in the arrangement, and whether there are associated roaming or tower- and site-sharing arrangements. They may also address matters such as marketing and access to handsets.

²⁰ Such equipment includes mobile wireless antennas or microwave antennas. Tower- and site-sharing arrangements may also include space at the tower or site location where the wireless carrier wishes to install equipment, such as electronics and connections.

Wholesale network access

Market power assessment

Wholesale roaming

46. The national wireless carriers submitted that the wholesale roaming market is sufficiently competitive pursuant to the market power framework outlined in Telecom Decision 94-19. With respect to the definition of the relevant market, Bell Mobility submitted that the definition would need to incorporate network technology, the type of service (i.e. voice, text, or data), and other commercial variables such as reciprocity. Bell Mobility added that the relevant geographic market would have to consider the locations of the network of the wireless carrier requesting roaming service and of the wireless carrier providing service. RCP argued that the geographic market for wholesale roaming is national, since the goal of the new entrants is to offer their subscribers national roaming coverage.
47. With respect to demand and supply conditions, the national wireless carriers submitted that competitors seeking wholesale roaming have access to multiple sources of supply. TCC submitted that switching roaming providers is not difficult given that the Commission banned exclusivity clauses in Telecom Decision 2014-398. The national wireless carriers also submitted that competitors can avoid wholesale roaming costs by expanding their own network coverage.
48. The regional wireless carriers submitted that the national wireless carriers' scale, access to capital, and access to devices and technology grant those carriers significant market power with respect to wholesale roaming. The regional wireless carriers argued that due to factors such as limited network footprints, they and the new entrants have no option but to negotiate with the national wireless carriers to obtain national wholesale roaming.
49. The new entrants submitted that the national wireless carriers possess market power with respect to wholesale roaming. With respect to the definition of the relevant market, Eastlink stated that the relevant product market is wholesale roaming, and that the geographic market could be national. WIND submitted that the geographic market is provincial or local. Videotron submitted that the relevant geographic market is provincial, or it mirrors the Tier 2 regions²¹ generally used by Industry Canada during spectrum auctions.
50. The new entrants also submitted that they must enter into wholesale roaming arrangements to offer national network coverage, which is necessary to attract customers and compete effectively. They stated that wholesale roaming is required to provide network coverage in areas where they do not have spectrum, and to

²¹ Industry Canada uses the concept of tiers in *Service Areas for Competitive Licensing*, Spectrum Management and Telecommunications (Industry Canada: December 2006, Issue 3). Tier 2 consists of 14 large service areas covering the entire area of Canada.

provide incremental network coverage within the areas where they have spectrum and are building network facilities.

51. With respect to demand and supply conditions, the new entrants submitted that they must enter into wholesale roaming arrangements with Bell Mobility, RCP, and/or TCC to provide broad or national network coverage to their retail customers. Eastlink indicated that Bell Mobility and TCC share a network, and that RCP has a national network, such that in many regions across Canada there are two network providers with which it could negotiate.
52. The new entrants argued that high wholesale roaming rates made their retail offerings unsustainable, since they have to absorb substantial losses to provide their customers with unrestricted, unlimited, Canada-wide roaming, in step with the retail offerings of the national wireless carriers.
53. Eastlink and Videotron submitted that there is no evidence of rivalrous behaviour in the provision of wholesale roaming.
54. PIAC et al. argued that the national wireless carriers can exercise substantial market power for wholesale roaming. With respect to demand and supply conditions, PIAC et al. submitted that the new entrants cannot, in the short term, self-supply networks to compete effectively with the national wireless carriers.

Commission's analysis and determinations

55. The Commission has generally applied the framework set out in Telecom Decision 94-19 to determine whether there is market power in the provision of a service or class of services. Pursuant to that framework, the first step in assessing the competitiveness of a market is to define the relevant market, which is the smallest group of products and geographic area in which a firm with market power can profitably impose a sustainable price increase. The Commission also established a number of criteria to be examined when determining whether a market is competitive. These criteria include the market shares of the dominant and competing firms, as well as demand and supply conditions, including the availability of substitutes, barriers to entry into the market, and evidence of rivalrous behaviour.

Relevant market

56. With respect to the relevant product market for wholesale roaming, the Commission considers that commercial variables, such as reciprocity or volume discounts, do not form part of the product market definition, since wholesale roaming serves the same purpose regardless of the negotiated terms under which it is provisioned.
57. The Commission notes that wireless carriers that seek wholesale roaming generally seek voice, text, and data roaming together as part of the same arrangement. The Commission therefore considers that it is not necessary to divide the product market by service type.

58. With respect to network technology,²² the Commission considers that wholesale roaming offered on Global System for Mobile communications (GSM)-based²³ and code division multiple access (CDMA)-based networks are not substitutes, since retail customers would typically not have the kinds of devices that would support both GSM-based and CDMA-based networks. Therefore, GSM-based wholesale roaming is a distinct product market from CDMA-based wholesale roaming.
59. The Canadian mobile wireless services industry is converging to GSM-based networks. Wireless carriers have generally begun decommissioning their legacy CDMA-based networks. As a result, the Commission does not consider it necessary to conduct a market power analysis on CDMA-based wholesale roaming.
60. With respect to the relevant geographic market for GSM-based wholesale roaming, if wireless carriers are to compete effectively in the retail market, they must offer broad or national mobile wireless coverage to their retail customers. The Commission considers that broad or national network coverage would enable a wireless carrier's retail customers to place and receive calls, send and receive text messages, and access data services as required in each of the ten provinces. In addition, broad or national network coverage may include coverage in one or more of the territories.
61. A provincial or regional geographic market definition would be inappropriate because the coverage provided by many wholesale roaming arrangements and strategic arrangements between wireless carriers usually spans multiple provinces.
62. Accordingly, the Commission considers that the appropriate geographic market for GSM-based wholesale roaming is national.
63. In light of the above, the Commission **determines** that the relevant market to be examined is GSM-based wholesale roaming at a national level.

Market share

64. Prior to the deployment of GSM-based networks by other wireless carriers, RCP was the only wireless carrier capable of providing GSM-based wholesale roaming and was able to impose long-term exclusive arrangements. However, the Commission's determination in Telecom Decision 2014-398 to prohibit exclusivity clauses and the entry into force of the wholesale roaming caps have resulted in changes to the wholesale roaming market. Therefore, in this particular case, current national market

²² Wireless networks in Canada are primarily based on one of two types of technologies: code division multiple access (CDMA) or Global System for Mobile communications (GSM). Wireless carriers are continually upgrading their networks to support higher-speed data and new services. Currently, these networks are evolving to a single long-term network standard commonly referred to as long-term evolution (LTE).

²³ "GSM-based networks" refers to GSM, Universal Mobile Telecommunications System (UMTS), high-speed packet access (HSPA), evolved HSPA (HSPA+), and their evolution to LTE networks.

shares for GSM-based wholesale roaming are not appropriate indicators of market conditions, as they do not reflect recent developments in the market.

Demand conditions

65. With respect to the availability of economically feasible and practical substitutes, the Commission notes that wholesale roaming enables wireless carriers to (i) provide coverage in areas where they do not have spectrum, and (ii) fill in coverage gaps in areas where they do have spectrum, but have not deployed network facilities.
66. To provide broad or national network coverage to its retail customers without relying on wholesale roaming, a wireless carrier would have to acquire spectrum and build out extensive network facilities (either on its own or as part of a network-sharing arrangement). There will continue to be an imbalance in spectrum holdings between national wireless carriers and smaller wireless carriers in the short to medium term. Building out a broad or national mobile wireless network is not an economically feasible or a practical substitute for wholesale roaming in the short to medium term.
67. Furthermore, if a smaller wireless carrier were to enter into a network-sharing arrangement, the arrangement would likely only cover a particular portion of the country, and wholesale roaming arrangements would likely still be necessary for smaller wireless carriers to provide broad or national network coverage to their retail customers.
68. Therefore, the Commission **determines** that there are no economically feasible or practical alternatives to GSM-based wholesale roaming for smaller wireless carriers in the national market in the short to medium term.
69. With respect to the ability of wireless carriers to switch suppliers, the prohibition of exclusivity clauses set out in Telecom Decision 2014-398 has made it easier for wireless carriers to switch suppliers of wholesale roaming. However, the evidence on the record of this proceeding indicates that there continues to be a significant imbalance in the bargaining positions between certain wireless carriers, particularly between the national wireless carriers and smaller wireless carriers.
70. While GSM-based wholesale roaming is available from multiple wireless carriers, the Commission considers that smaller wireless carriers must obtain wholesale roaming from at least one national wireless carrier to provide broad or national network coverage to their retail customers. Furthermore, new entrants can usually choose from only the national wireless carriers at the boundaries of the new entrants' networks, where most of the roaming by the new entrants' retail customers occurs. Accordingly, the Commission **determines** that there remain significant difficulties in switching suppliers in the national market for GSM-based wholesale roaming.
71. In light of the above, the Commission **determines** that GSM-based wholesale roaming from the national wireless carriers under reasonable rates, terms, and conditions is necessary for smaller wireless carriers, including new entrants, to offer broad or national network coverage to their retail customers.

Supply conditions

72. With respect to barriers to entry, spectrum is a scarce and expensive resource, and mobile wireless network deployment involves lengthy construction times and high sunk investment costs. It is unlikely that an additional wireless carrier will be able to duplicate the scale of the national wireless carriers' networks and compete with them in the market for GSM-based wholesale roaming in the short to medium term. Therefore, the Commission **determines** that the barriers to entry in the national market for GSM-based wholesale roaming are high, and that the likelihood of new entry in the short to medium term is low.
73. The national wireless carriers have little, if any, incentive to offer wholesale roaming to smaller wireless carriers at reasonable terms and conditions. Indeed, there is little, if any, evidence on the record of this proceeding that the national wireless carriers compete with each other for the business of smaller wireless carriers. Therefore, the Commission finds that there is a lack of rivalrous behaviour in the national market for GSM-based wholesale roaming between the national wireless carriers.

Conclusion

74. In light of the above determinations, the Commission considers that the national wireless carriers collectively have the ability and incentive to, with regard to GSM-based wholesale roaming in the national market, maintain rates and impose terms and conditions that would not prevail in a competitive market. Therefore, the Commission **determines** that Bell Mobility, RCP, and TCC collectively possess market power in the national market for GSM-based wholesale roaming.

Wholesale MVNO access

75. Potential MVNOs, including Cogeco, Lycamobile, Orange, Raven, and Tucows, as well as the CCSA and CNOC, generally submitted that they were seeking wholesale access to the same technologies that wireless carriers use to provide service to their retail customers (i.e. GSM-based wholesale access services).
76. CNOC submitted that wholesale roaming and full MVNO access share similar market conditions, including shared demand and supply conditions.
77. Potential MVNOs submitted that large wireless carriers have generally refused to negotiate MVNO arrangements, or, where they have been willing to negotiate, offer unreasonable rates and terms. Parties interested in entering the retail market as full MVNOs also submitted that wireless carriers will only consider providing wholesale access on a branded reseller basis.
78. L'Union submitted that the limited number of MVNOs operating in the Canadian market indicates that the existing market conditions do not enable MVNOs to emerge easily. Similarly, Klass/Ellis submitted that dominant wireless carriers exercise their market power to ensure that the MVNO market remains small.

79. RCP submitted that, with respect to negotiated access for MVNOs, it currently has eight MVNOs operating on its network, and that it has held exploratory discussions with a number of other companies seeking wholesale MVNO access.
80. TCC submitted that even though it currently has no MVNOs operating on its network, it has demonstrated that it is willing to negotiate with providers wishing to offer mobile wireless services as MVNOs. TCC also submitted that it faces network capacity issues owing to the lower amount of spectrum it has compared to Bell Mobility and RCP. TCC submitted that this capacity constraint limits its ability to conduct MVNO arrangements, but that it would continue to evaluate MVNO opportunities as network capacity allows.

Commission's analysis and determinations

81. With respect to the relevant product market for wholesale MVNO access, similar to wireless carriers seeking wholesale roaming, MVNOs require access to GSM-based networks to offer retail services. Therefore, the Commission considers that the relevant product market to be examined is GSM-based wholesale MVNO access.
82. An MVNO that enters the Canadian retail market could sell its services on a national or regional basis. However, to compete in the retail market and offer services similar to other wireless carriers, MVNOs would need to provide broad or national network coverage.
83. For the purpose of this examination, the relevant market for wholesale MVNO access is similar to the relevant market for GSM-based wholesale roaming. The Commission therefore **determines** that the relevant market to be examined is GSM-based wholesale MVNO access at a national level.
84. With respect to market share for wholesale MVNO access, the Commission considers that, in this particular case, market share is not an appropriate indicator of market conditions because of the inability of potential MVNOs to conclude arrangements they attempted to negotiate with the national wireless carriers.
85. Given that MVNOs, like wireless carriers seeking GSM-based wholesale roaming, require access to the RAN of wireless carriers to provide retail mobile wireless services, the Commission considers that the market conditions for GSM-based wholesale roaming and MVNO access are similar, and that the market power analysis for the two services would be generally similar.
86. With respect to rivalrous behaviour in the market for wholesale network access for MVNOs, the national wireless carriers have exhibited limited interest in providing potential MVNOs with access that would enable the provision of retail mobile wireless voice, text, and data services on a national or regional basis. The Commission considers that the inability of these parties to negotiate access to necessary wholesale inputs demonstrates that there is no rivalrous behaviour between the national wireless carriers in the provision of GSM-based wholesale MVNO access at a national level.

87. In this decision, the Commission has determined that the national wireless carriers collectively possess market power in the national market for GSM-based wholesale roaming. Given the similarities between wholesale roaming and MVNO access, the Commission considers that a similar finding of market power can be made for the national market for GSM-based wholesale MVNO access.
88. In light of the above, the Commission **determines** that Bell Mobility, RCP, and TCC collectively possess market power in the national market for GSM-based wholesale MVNO access.

Essential service assessment

89. The national wireless carriers submitted that wholesale network access for both roaming and MVNOs does not meet the Commission's test for essentiality, since the necessary facilities are all duplicable. They argued that the existence of multiple facilities-based providers, at both the national and regional levels, means that wireless networks are duplicable.
90. Bell Mobility submitted that wireless carriers have demonstrated that it is possible to access spectrum, secure capital, enter the retail market, and expand their operations.
91. TCC argued that while some competitors might lack the desire and resources to build their own network, the essential services test is not assessed on a competitor-by-competitor basis, but is based on whether any entity has the capability to duplicate the facilities. With respect to spectrum as a barrier to entry, TCC submitted that potential wireless carriers are free to participate in any wireless spectrum auction conducted by Industry Canada or to acquire wireless spectrum via transfer. RCP submitted that access to spectrum was not a barrier to entry given the rules governing the 2008 and 2014 spectrum auctions, which favoured new entrants over the national wireless carriers.
92. The regional wireless carriers submitted that wholesale roaming is an essential service for them and other smaller wireless carriers. They added that because wireless spectrum is limited and only licensed regionally by Industry Canada, the ability of regional wireless carriers and new entrants to build their own national networks is cost-prohibitive.
93. The new entrants also generally submitted that wholesale roaming is an essential service for them, since without such access they could not offer broad or national network coverage to their retail customers. They further submitted that they cannot replicate the scale of the national wireless carriers' mobile wireless networks because of extremely high barriers to entry.
94. Potential MVNOs, as well as the CCSA, CNOC, and Mobilexchange, generally submitted that the wholesale network access needed to enable MVNOs meets the Commission's essential services test. They submitted that the cost and scarcity of spectrum and the high cost of building a mobile wireless network are high barriers to entry that restrict the ability of potential competitors to enter the retail market.

CNOC argued that the national wireless carriers overstated the duplicability on a national scale of mobile wireless networks, and that the national wireless carriers have all found it necessary to develop arrangements with other wireless carriers to operate on a national scale.

95. Potential MVNOs also generally submitted that the control of network access by large wireless carriers prevents entry into the retail market and limits the ability of existing competitors to compete in the retail market. Consequently, the control exercised on these facilities by large wireless carriers has resulted, and will continue to result, in a substantial lessening or prevention of competition in the downstream retail market.
96. The Bureau submitted that the national wireless carriers have the incentive to engage in vertical foreclosure, and to use the rates they charge to new entrants for services such as wholesale roaming to raise the costs to their rivals in the downstream retail market.
97. PIAC et al. submitted that the roaming services provided by the national wireless carriers are essential, since these services are necessary to enable new entrants to compete effectively.
98. Klass/Ellis submitted that the wholesale network access required for roaming and MVNOs are bottleneck facilities and meet the Commission's essential services test.

Commission's analysis and determinations

99. In Telecom Decision 2008-17, the Commission determined that to be essential, a facility, function, or service must satisfy all of the following conditions:
 - it is required as an input by competitors to provide telecommunications services in a relevant downstream market;
 - it is controlled by a firm that possesses upstream market power such that withdrawing mandated access, or denying access to the facility, would likely result in a substantial lessening or prevention of competition in the downstream retail market; and
 - it is not practical or feasible to duplicate the functionality of the facility.
100. As noted above, MVNOs and wireless carriers seeking GSM-based wholesale roaming require a GSM-based wholesale service to access the RAN of wireless carriers. The Commission therefore considers it appropriate to apply the essential services test to both wholesale services concurrently.

Required input

101. To enter the retail market, competitors require spectrum and the network components to access that spectrum, whether through self-supply or through negotiated access. Competitors also require broad or national network coverage to offer competitive retail mobile wireless services.
102. In light of the above, the Commission **determines** that wholesale network access to the GSM-based networks of the national wireless carriers is a required input for competitors in the downstream retail market.

Upstream market power and its effect on downstream competition

103. In the previous section, the Commission determined that Bell Mobility, RCP, and TCC collectively possess market power in the national market for GSM-based wholesale network access for both wholesale roaming and MVNO access.
104. Based on the record of this proceeding, the presence of smaller wireless carriers in the retail market has resulted in significant price reductions and increased consumer choice. Without access to the national wireless carriers' networks, smaller wireless carriers would be prevented from offering retail services that can compete effectively and sustainably with the national wireless carriers' retail offerings. Consequently, denial of access to the national wireless carriers' GSM-based networks would substantially lessen or prevent competition from smaller wireless carriers in the downstream retail market.
105. The Commission notes that there are few wholesale MVNO access arrangements in Canada, despite significant demand demonstrated on the record of this proceeding. Denial of access to the national wireless carriers' GSM-based networks has resulted in the prevention of competition from MVNOs in the downstream retail market and, consequently, fewer choices for consumers.
106. In light of the above, the Commission **determines** that denying competitors access to GSM-based wholesale network access services at a national level would likely result in a substantial lessening or prevention of competition in the downstream retail market.

Duplicability

107. The presence of various smaller wireless carriers demonstrates that wholesale network access facilities are duplicable on a regional basis. However, to date, none of these smaller wireless carriers have been able to duplicate the scale and coverage of the national wireless carriers' networks. While some smaller wireless carriers have recently been able to expand their spectrum holdings, it is unlikely that they will be able to duplicate the scale and coverage of the national wireless carriers' networks in the short to medium term. Also, the Commission considers that an MVNO would not be able to provision its own facilities to duplicate the scale and coverage of the national wireless carriers' networks.

108. Accordingly, the Commission **determines** that the GSM-based mobile wireless networks of Bell Mobility, RCP, and TCC cannot be practically and feasibly duplicated by competitors in the short to medium term.

Conclusion

109. In light of the above, the Commission **determines** that wholesale network access to the GSM-based mobile wireless networks of Bell Mobility, RCP, and TCC is essential for their competitors to provide broad or national network coverage to their retail customers. **As such, the Commission determines that GSM-based wholesale roaming and MVNO access provided by Bell Mobility, RCP, and TCC are essential.**

Mandating wholesale roaming and MVNO access services

110. Parties did not specifically request that the Commission mandate wholesale roaming provided by Bell Mobility, RCP, and TCC.²⁴ However, several parties, including the new entrants, the regional wireless carriers, Klass/Ellis, and PIAC et al., submitted that the Commission should regulate the wholesale roaming rates charged by the national wireless carriers.

111. The national wireless carriers submitted that regulation of wholesale roaming rates would adversely impact wireless carriers' incentive to invest in their networks. They generally argued that regulation of wholesale roaming rates would encourage wireless carriers to rely on other wireless carriers' networks instead of building and expanding their own networks.

112. Potential MVNOs, including Cogeco, Lycamobile, Orange, Raven, and Tucows, as well as the CCSA and CNOOC, submitted that the Commission should mandate the provision of wholesale MVNO access.

113. Orange argued that competition from MVNOs can reduce retail prices and expand the wireless market by reaching niche and underserved segments, and can also result in the introduction of new and innovative services. Orange added that MVNOs will enable the host network to make a high-margin, low-risk return on its investment in existing network infrastructure, and will enable the infrastructure to be used more efficiently.

114. Cogeco submitted that the entry of MVNOs in the market would increase the amount of investment in the telecommunications industry, since it would be necessary for these service providers to make substantial investments in facilities and operational systems to operate as full MVNOs.

115. Vaxination argued that the creation of an MVNO market is the only way to create a sustainable environment that attracts new competitors that can provide a healthier

²⁴ The conditions of licence established by Industry Canada require licensees to provide wholesale roaming on their networks to other licensees.

market. Vaxination argued that the creation of an MVNO market would uncouple the level of competition from access to spectrum.

116. The national wireless carriers, the regional wireless carriers, Eastlink, Videotron, and WIND opposed mandated access for MVNOs. They supported facilities-based competition over competition based on MVNO/resale regulation.
117. Bell Mobility submitted that facilities-based competition delivers the greatest benefits in terms of innovation, network efficiency, and investment. The national wireless carriers generally submitted that mandated wholesale MVNO access would have a chilling impact on investment.
118. Videotron submitted that mandated wholesale MVNO access would severely undermine the business case for facilities-based new entry. It argued that MVNOs tend to target the same market segments that a facilities-based new entrant must target if it is going to become sustainable. WIND argued that facilities-based competition from the new entrants needs more time to prove itself as a viable option for more retail competition.

Commission's analysis and determinations

119. The Commission considers that its determination on whether to mandate wholesale roaming and MVNO access should take into account its objectives for the mobile wireless market stated earlier in this decision, which include the need for (i) continued innovation and investment in high-quality telecommunications facilities, and (ii) sustainable competition that provides benefits to Canadians, such as reasonable prices and innovative services.
120. With respect to wholesale MVNO access, the Commission considers that MVNOs can play a role in increasing consumer choice and value in the retail market. However, it is not appropriate to mandate wholesale MVNO access at this time for the reasons described below.
121. Investment in wireless network infrastructure by wireless carriers is important to ensure that Canadians have access to mobile wireless networks and services of high quality in all regions of Canada. The new entrants have made and are planning to make significant investments in spectrum and their wireless networks. The Commission considers that mandating wholesale MVNO access at this time would significantly undermine these investments, particularly outside urban core areas.
122. Accordingly, if the Commission were to mandate GSM-based wholesale MVNO access provided by the national wireless carriers, this permanent network access would likely discourage continued investment by wireless carriers, because they could rely on this access rather than investing in their own mobile wireless network infrastructure.
123. The Commission's determinations with respect to the regulation of rates, terms, and conditions for wholesale roaming, as set out later in this section, will allow smaller

wireless carriers such as the new entrants to expand their wireless networks, thus becoming a viable alternative source of supply for MVNOs. The Commission also considers that these determinations will not act as a disincentive for wireless carriers to continue to invest in their network facilities because, among other things, wholesale roaming is incidental access to the network.

124. Furthermore, the Commission is using its existing powers to take action to reduce certain barriers faced by MVNOs to facilitate, and allow more flexibility in, their commercial negotiations with wireless carriers. These measures, set out later in this decision, should also encourage the emergence of a competitive market for wholesale MVNO access.

125. In light of the above, the Commission **determines** that it is not appropriate to mandate wholesale MVNO access.

126. With respect to wholesale roaming, the Commission considers that continued forbearance of GSM-based wholesale roaming provided by Bell Mobility, RCP, and TCC to Canadian wireless carriers other than Bell Mobility, RCP, and TCC will not enhance the efficiency and competitiveness of mobile wireless services consistent with paragraph 7(c) of the Act. Therefore, pursuant to subsection 34(1) of the Act, the Commission **determines**, as a question of fact, that to continue to refrain from exercising its powers and performing its duties under forborne sections of the Act in relation to the regulation of GSM-based wholesale roaming provided by Bell Mobility, RCP, and TCC to Canadian wireless carriers other than Bell Mobility, RCP, and TCC is not consistent with the policy objectives set out in section 7 of the Act.

127. The Commission further considers that, even though the wholesale roaming caps have provided some relief to smaller wireless carriers, the interests of users are not sufficiently protected because Bell Mobility, RCP, and TCC collectively have market power in the national market for GSM-based wholesale roaming, and wholesale access to their GSM-based networks is essential to providing broad or national network coverage so that smaller wireless carriers may compete sustainably in the retail market. Therefore, pursuant to subsection 34(2) of the Act, the Commission **determines**, as a question of fact, that the provision of GSM-based wholesale roaming by Bell Mobility, RCP, and TCC to Canadian wireless carriers other than Bell Mobility, RCP, and TCC is not subject to a level of competition sufficient to protect the interests of users.

128. Therefore, it is no longer appropriate for the Commission to refrain from regulating GSM-based wholesale roaming provided by Bell Mobility, RCP, and TCC to Canadian wireless carriers other than Bell Mobility, RCP, and TCC. The Commission declares that the offering and provision of GSM-based wholesale roaming by Bell Mobility, RCP, and TCC to Canadian wireless carriers other than Bell Mobility, RCP, and TCC shall be subject to the Commission's powers and duties under sections 24, 25, 27, 29, and 31 of the Act. This includes the transmission of wireless voice calls, text messages, and data.

129. In light of the above, the Commission **directs** Bell Mobility, RCP, and TCC to provide GSM-based wholesale roaming to Canadian wireless carriers other than Bell Mobility, RCP, and TCC, subject to the rates, terms, and conditions established by the Commission in this decision.

Regulatory measures with respect to wholesale roaming

Rates

130. Most parties seeking regulation of the national wireless carriers' wholesale roaming rates, including WIND, the regional wireless carriers, and PIAC et al., submitted that these rates should be based on costs. Other parties, such as Eastlink, SSi, and Videotron, submitted that a retail-minus approach²⁵ would be a simple and practical alternative to cost-based regulation.

131. The national wireless carriers submitted that any wholesale roaming rates established by the Commission should take into account whether the roaming is happening in-territory or out-of-territory, or in an urban or rural area. In general, they submitted that such rate differentiation is necessary to provide incentives for continued network investment and deployment for all wireless carriers.²⁶

132. The new entrants argued that there should be no difference in urban versus rural rates because wireless carriers do not charge their retail customers more for the use of their rural network than for the use of their urban network.

133. Eastlink submitted that in-territory and out-of-territory roaming should be treated in the same manner because the company could not replicate the national wireless carriers' networks within its licensed areas or in areas where it does not have spectrum.

Commission's analysis and determinations

Approach

134. The Commission considers that using a retail-minus approach to set rates for wholesale roaming provided by the national wireless carriers would not be appropriate. The prevalence of bundled pricing (e.g. for Internet, home phone, and mobile wireless services) and wireless pricing plans (e.g. one price for voice, text, and data) in the retail market makes it difficult to establish, with accuracy, an appropriate rate for any particular service. Also, the retail-minus approach would require frequent adjustments to the rates given the dynamic nature of retail pricing.

²⁵ Under a retail-minus approach, all cost elements that are not pertinent to the provision of the wholesale service are deducted from the current retail price of a service.

²⁶ Such a rate structure would result in in-territory rates being higher than out-of-territory rates and rural rates being higher than urban rates.

135. An approach based on the Commission's Phase II costing approach²⁷ is more appropriate because it captures the underlying cost elements relevant to the provision of a particular service and takes into account costs over a period of time. The Commission considers that using a cost-based approach to establish wholesale rates will confer price certainty within the wireless industry and enable the national wireless carriers to recover their costs and obtain a fair return on their investments.
136. With respect to rate differentiation, a wholesale roaming rate structure that distinguishes between urban and rural roaming aims to preserve the incentive for wireless carriers to keep investing in rural areas. Further, a wholesale roaming rate structure that distinguishes between in-territory and out-of-territory roaming could discourage smaller wireless carriers, including new entrants, from relying on wholesale roaming in areas where they already have spectrum.
137. From an implementation perspective, the Commission considers that a wholesale roaming rate structure that distinguishes between urban versus rural or in-territory versus out-of-territory roaming would likely add complexity to both the costing exercise and billing. This approach would require continuous adjustments to rates because it depends on how the wireless carriers, in particular the new entrants and smaller wireless carriers, plan to extend or deploy their networks. Accordingly, it would be more appropriate to establish uniform wholesale roaming rates for each national wireless carrier and separately for voice, text, and data.
138. The Commission considers that an approach that establishes cost-based wholesale roaming rates for Bell Mobility, RCP, and TCC across their respective networks must take into consideration an incentive for these carriers to keep investing in and deploying wireless networks, and for new entrants and smaller wireless carriers to invest in areas where they have spectrum. This incentive can be more appropriately addressed in the process to finalize the wholesale roaming tariffs.
139. In light of the above, the Commission **determines** that rates for GSM-based wholesale roaming for each of the voice, text, and data services provided by Bell Mobility, RCP, and TCC across their respective networks are to be established based on the Phase II costing approach.

Implementation

140. In light of the above, the Commission **directs** Bell Mobility, RCP, and TCC to file proposed tariffs for GSM-based wholesale roaming provided to Canadian wireless carriers other than Bell Mobility, RCP, and TCC by **4 November 2015**.
141. The Commission also **directs** Bell Mobility, RCP, and TCC to file regulatory economic studies in support of their proposed tariffs for GSM-based wholesale roaming, using the Phase II costing approach, by **4 November 2015**. These studies

²⁷ The Phase II costing approach is used to calculate the incremental, forward-looking, network element costs causal to the provision of a specific service.

must be submitted in compliance with existing confidentiality guidelines²⁸ and contain the level of detail required²⁹ for regulatory economic studies.

142. In addition, Bell Mobility, RCP, and TCC are to each provide an electronic copy of the cost model used to support their proposed GSM-based wholesale roaming rates. The cost model should identify all methodologies and assumptions, and provide supporting rationale. The populated model should include all the associated linked spreadsheet files and any other supporting data used to develop the costs. The cost model should provide all equations used to calculate costs. Bell Mobility, RCP, and TCC are to also provide a brief description of the input data variables, the vintage of the input data, modelling assumptions with supporting rationale, and any other pertinent costing details.
143. Pending its final determination on the proposed tariffs, the Commission **approves on an interim basis** a maximum rate for each of GSM-based voice, text, and data wholesale roaming provided by Bell Mobility, RCP, and TCC across their respective networks to Canadian wireless carriers other than Bell Mobility, RCP, and TCC. This rate is equal to the highest rate charged by each of Bell Mobility, RCP, and TCC to any other Canadian wireless carrier for each of GSM-based voice, text, and data wholesale roaming as of the date of this decision. Bell Mobility, RCP, and TCC are permitted to charge GSM-based wholesale roaming rates that are below these maximum rates.
144. The Commission **directs** Bell Mobility, RCP, and TCC to issue interim tariff pages³⁰ reflecting the interim GSM-based wholesale roaming rates discussed above, as well as the Commission's determinations in this decision, by **4 June 2015**.

Terms and conditions

145. Several parties, particularly the new entrants, requested the regulation of terms and conditions other than rates with respect to wholesale roaming. The Commission will address the following requests in this section:
- disclosure of the identity of roaming partners;
 - equivalent treatment of wholesale and retail customers by the national wireless carriers;
 - access to wholesale roaming on a seamless basis (seamless roaming); and
 - call hand-back.³¹

²⁸ See Telecom Regulatory Policy 2012-592.

²⁹ See Commission letter dated 13 September 2013 regarding information to be provided in support of wholesale service tariff applications.

³⁰ These tariff pages can be submitted to the Commission without a description page or a request for approval; a tariff application is not required.

Disclosure of the identity of roaming partners

146. Eastlink submitted that provisions that prevent wireless carriers from disclosing the identity of their roaming providers should be prohibited. RCP indicated that the reason for such a provision was to avoid the association of RCP's mobile wireless network with the mobile wireless network of a new entrant. It also did not want the roaming partner to use the quality of RCP's network as a selling point.

Commission's analysis and determinations

147. The Commission considers that it is important for current and potential customers of wireless carriers to know on which wireless networks they may roam and that it would be appropriate for wireless carriers to inform their customers about the networks on which they may roam, regardless of the provider of wholesale roaming and the underlying network technology.

148. Accordingly, pursuant to section 24 of the Act, the Commission, as a condition of offering and providing wholesale roaming by Canadian mobile wireless carriers, prohibits wholesale roaming providers from preventing wireless carriers from disclosing the identity of their wholesale roaming providers to their current or potential customers. This condition applies to all wireless carriers, regardless of the network technology being used.

Treatment of wholesale and retail customers by the national wireless carriers

149. Videotron submitted the following proposals:

- prohibit charging for terminating (incoming) long distance calls and text messages unless the host wireless carrier also charges its own retail customers for the same while roaming in Canada, and
- prohibit the host wireless carrier from using a minimum data increment that is superior to the minimum data increment charged to the host wireless carrier's own retail customers while roaming in Canada.

150. WIND also submitted that there should be no charge for incoming text messages while its customers roam in Canada.

Commission's analysis and determinations

151. Given the Commission's determination in this decision that the rates for GSM-based wholesale roaming provided by Bell Mobility, RCP, and TCC will be cost-based, the Commission considers that no further action is required with respect to the requests regarding incoming long distance calls and text messages.

³¹ Call hand-back is a technical solution that would enable a long distance call originated by a roaming mobile subscriber to be routed back to his or her home network.

152. The Commission considers that it would be appropriate to make a determination with respect to a minimum data increment for GSM-based wholesale data roaming provided by the national wireless carriers to Canadian wireless carriers other than Bell Mobility, RCP, and TCC when the Commission disposes of the final tariffs for Bell Mobility, RCP, and TCC.

Seamless roaming

153. Several new entrants and other interveners, including CNOC and Vaxination, submitted that the Commission should require wholesale roaming to be provided on a seamless basis. The new entrants submitted that seamless roaming would lead to fewer dropped calls³² while their customers move in and out of their network footprints. The national wireless carriers opposed the request, and submitted that enabling seamless roaming on their networks would be costly and complex.

Commission's analysis and determinations

154. The Commission considers that the new entrants have not provided sufficient evidence (for example, the number of complaints or the number of dropped calls) to demonstrate the impact of the absence of seamless roaming.

155. While GSM-based wholesale roaming provided by the national wireless carriers is essential, it does not need to be offered on a seamless basis for smaller wireless carriers, including new entrants, to offer broad or national network coverage to their retail customers.

156. Therefore, the Commission **determines** that Bell Mobility, RCP, and TCC are not required to provide GSM-based wholesale roaming on a seamless basis.

Call hand-back

157. WIND requested the ability to terminate the non-domestic portion of calls made by WIND's customers when they are roaming (referred to as "call hand-back"). Alternatively, it requested a cap on the markup that a national wireless carrier can apply for the termination of international calls. RCP submitted that it is standard practice for the visited carrier to carry and terminate long distance calls, and that implementing call hand-back would result in additional costs for RCP.

Commission's analysis and determinations

158. The Commission considers that WIND has not provided sufficient evidence (for example, related expenses or traffic volume) to demonstrate the impact of the absence of call hand-back. Consequently, the Commission **determines** that Bell Mobility, RCP, and TCC are not required to provide call hand-back on their GSM-based mobile wireless networks. For the same reason, the Commission also

³² A call may be dropped as a customer actively moves in and out of the network footprints of different wireless carriers if those carriers have not implemented seamless roaming across their networks.

determines that it would not be appropriate to establish a cap on the markup for the termination of international calls.

Regulatory measures with respect to wholesale MVNO access

Acquisition of mobile network codes by full MVNOs

159. Mobile network codes (MNCs)³³ in Canada are assigned by the Canadian Numbering Administrator pursuant to the Canadian International Mobile Subscriber Identity (IMSI) Guideline (the Guideline). The Guideline was developed by the Canadian Steering Committee on Numbering (CSCN)³⁴ and approved by the Commission.³⁵ The Guideline requires that an applicant for an MNC hold a spectrum licence from Industry Canada. Thus, MVNOs cannot acquire MNCs.
160. CNOC, Cogeco, Lycamobile, and Orange submitted that full MVNOs should be permitted to acquire their own MNCs, which would enable them to provision their own IMSI numbers. Cogeco submitted that allowing full MVNOs to acquire their own MNCs is critical to ensuring that a full MVNO can operate in the retail market independently of its host wireless carrier.

Commission's analysis and determinations

161. The Commission considers that allowing full MVNOs to acquire MNCs would provide MVNOs with a greater level of independence, because they would not have to rely on the host wireless carriers' MNCs and subscriber identification module (SIM) cards. Having its own unique MNC enables a full MVNO to more easily switch its host wireless carrier, make arrangements with multiple wireless carriers, and negotiate its own wholesale roaming arrangements (e.g. with international wireless carriers). The Commission therefore considers that it is appropriate to amend the Guideline to allow for the assignment of MNCs to full MVNOs.
162. The Commission hereby **directs** the CSCN to (i) amend the Guideline to allow full MVNOs to acquire MNCs, and (ii) submit the amended Guideline for Commission approval by **6 July 2015**.

MVNO restrictions in wholesale roaming arrangements

163. WIND submitted that restrictions in certain wholesale roaming arrangements have impeded its ability to support MVNOs on its network. It added that wholesale

³³ The MNC is part of the International Mobile Subscriber Identity (IMSI) number. The subscriber identification module (SIM) card in every mobile device is programmed with a unique IMSI number. Each IMSI number identifies the mobile subscription, and the home country and home mobile network of that subscription. The MNC identifies a subscriber's home mobile network.

³⁴ The CSCN is a working group of the CRTC Interconnection Steering Committee, an organization established by the Commission to assist in developing information, procedures, and guidelines as may be required in various aspects of the Commission's regulatory activities. The CSCN addresses numbering issues that fall under the Commission's jurisdiction.

³⁵ The Commission approved the Guideline in Telecom Decision 2013-591.

roaming arrangements should not include restrictions that prevent customers of any MVNOs operating on its network to incidentally roam on a national wireless carrier's network in the same manner as WIND's customers do.

164. RCP submitted that it does not restrict domestic wholesale roaming partners from providing service to legitimate MVNOs, including when those MVNOs are other Canadian telecommunications companies that are genuinely establishing MVNO operations. RCP added that such restrictions in wholesale roaming arrangements were aimed at preventing wireless carriers from attempting to resell access to RCP's network to other wireless carriers.

Commission's analysis and determinations

165. The Commission considers that restrictions in wholesale roaming arrangements that may impede a wireless carrier from offering wholesale network access to an MVNO represent a barrier to entry to MVNOs.
166. Removing such restrictions, which prevent smaller wireless carriers, including new entrants, from offering access to their mobile wireless networks to MVNOs, will further the development of a competitive market for wholesale network access.
167. Accordingly, pursuant to section 24 of the Act, as a condition of offering and providing GSM-based wholesale roaming, Bell Mobility, RCP, and TCC must provide roaming on their GSM-based mobile wireless networks to all subscribers served by their wholesale roaming partners, including the subscribers of any MVNOs operating on their wholesale roaming partners' networks.

Tower and site sharing

Market power assessment

168. The national wireless carriers submitted that they do not have market power with respect to tower and site sharing. They argued that there are multiple options for wireless carriers to deploy their mobile wireless networks, such as building their own towers, seeking access to other wireless carriers' towers and sites, or using towers and sites owned by third parties.
169. With respect to the relevant market, the national wireless carriers submitted that both tower and site sharing could be considered to be in the same product market as they are generally substitutes for one another. Bell Mobility submitted that the relevant geographic market for towers and sites is highly localized, because each tower and site is unique, with its own topography, technical and structural issues, and municipal regulations. RCP submitted that towers must be within a certain area to achieve the local network coverage objectives of a wireless carrier, and that the relevant geographic market for tower and site sharing is likely confined to a local municipal area.

170. The new entrants, CNOC, Klass/Ellis, PIAC et al., and Vaxination submitted that the national wireless carriers have market power with respect to tower and site sharing.³⁶ They submitted that the national wireless carriers are able to impose substantial delays and onerous wholesale rates, terms, and conditions on the new entrants, limiting their ability to deploy their networks and compete effectively in the retail market. CNOC, Eastlink, Videotron, and WIND submitted that it would be prohibitively expensive for a competitor to replicate the towers that the national wireless carriers have in place in order to compete with them at the retail level.
171. Eastlink, Videotron, and WIND stated that tower sharing and site sharing should each be considered a different product market, as sites with suitable elevation are limited in suburban and rural areas. Eastlink and Videotron submitted that the relevant geographic market is the tower itself and the area surrounding it. They argued that it would be possible to aggregate individual towers on a national basis as the conditions pertaining to the sharing of towers are the same for every tower in Canada.
172. CNOC submitted that the relevant geographic markets for tower and site sharing are both national and regional (i.e. ten provincial markets and one pan-territorial market).

Commission's analysis and determinations

173. With respect to the relevant product market, tower and site sharing provide the same functionality, since they both allow for the installation and operation of wireless equipment. As such, the Commission considers that tower and site sharing are substitutes, and are therefore in the same relevant product market.
174. With respect to the relevant geographic market, a wireless carrier enters into tower- and site- sharing arrangements in areas where it wishes to provide network coverage. In addition, the network coverage that can be obtained by a wireless carrier from a single tower or site, or a group of towers and/or sites, is limited to a specific area and depends on several factors, including spectrum, tower or site location, and the type and location of equipment installed. These factors create unique circumstances for every tower and site.
175. A definition of the tower- and site-sharing market as national or provincial would not be appropriate, as it would not take into account the network coverage needs of a specific wireless carrier or the uniqueness of each tower or site. Therefore, the relevant geographic market for tower and site sharing consists of one tower or site, or a group of towers and/or sites, in a particular area, depending on the network coverage needs of the wireless carrier that wishes to provide mobile wireless services in that area.

³⁶ PIAC et al. submitted that the regional wireless carriers also possess market power for tower and site sharing in their home territories.

176. In light of the above, the Commission **determines** that the relevant market for tower and site sharing is the network coverage area required by a wireless carrier that could be provided by a single tower or site, or a group of towers and/or sites, in a particular area.
177. Based on the determination above, assessing market power requires the Commission to examine each tower or site on an individual basis and assess whether the tower or site owner has market power based on the network coverage required by the wireless carrier requesting access to the tower or site. The network coverage that can be obtained by a wireless carrier from a specific tower or site depends on a multitude of factors, including the spectrum and equipment used, and the particular height of the antennas installed. While it would be possible for wireless carriers to provide this information for examination, it would be inefficient and unduly burdensome to do so.
178. The Commission therefore **determines** that, based on the record of this proceeding, it cannot make an assessment as to whether a wireless carrier has market power for tower and site sharing for the network coverage required by another wireless carrier for a specific tower or site, or a group of towers and/or sites. Consequently, the Commission **determines** that it cannot assess whether tower and site sharing is essential. The Commission will not mandate or require general wholesale tariffs for tower and site sharing at this time.

Regulatory oversight

179. Notwithstanding the determinations above, the Commission recognizes that there are likely situations where a single tower or site owned by a wireless carrier will be the only option through which another wireless carrier can install its wireless equipment to obtain the network coverage required. In these situations, a wireless carrier would likely have market power with respect to the provision of tower and site sharing.
180. The Commission's current powers under the Act allow it to impose conditions related to tower and site sharing, as well as to make findings of unjust discrimination and undue preference with respect to the provision of these services.³⁷ In addition, the Commission already has processes in place (i.e. its dispute resolution process³⁸ or Part 1 application process) to address disputes between parties.
181. The Commission considers that its existing powers and processes permit it to intervene with respect to a broad range of issues related to specific towers and sites, including instances where tower- and site-sharing rates would be unjustly discriminatory. Also, the Commission's existing powers and processes enable parties to settle disputes in a cost-effective manner, and provide an incentive for parties to negotiate reasonable rates, terms, and conditions, because parties would be able to request Commission intervention should negotiations fail.

³⁷ See section 24 and subsections 27(2) and (4) of the Act.

³⁸ See Broadcasting and Telecom Information Bulletin 2013-637.

182. The Commission therefore **determines** that its existing powers and processes are sufficient to address tower- and site-sharing issues related to rates, terms, and conditions.

Other issues

Remaining wholesale roaming rates

183. The evidence in this proceeding demonstrates that wholesale roaming caps have had positive impacts on smaller wireless carriers. Specifically, the wholesale roaming caps, in conjunction with the prohibition of exclusivity provisions in wholesale roaming arrangements set out in Telecom Decision 2014-398, have allowed certain smaller wireless carriers to conclude wholesale roaming arrangements expeditiously and at lower rates with the national wireless carriers.

184. In this decision, the Commission is requiring the national wireless carriers to issue interim tariff pages and file proposed final tariffs for GSM-based wholesale roaming provided to Canadian wireless carriers other than Bell Mobility, RCP, and TCC. Pursuant to subsection 27.1(5) of the Act, these tariffs prevail over the respective wholesale roaming caps. The Commission is therefore taking the necessary action to respond to an identified market problem based on a substantial evidentiary record and in light of its powers and duties under the Act, including ensuring the fulfillment of the policy objectives set out in section 7 of the Act.

185. Unless the Governor in Council repeals section 27.1 of the Act, the wholesale roaming caps will continue to apply to (i) GSM-based wholesale roaming provided by wireless carriers other than the national wireless carriers, (ii) any GSM-based wholesale roaming that the national wireless carriers provide to each other, and (iii) CDMA-based wholesale roaming provided by wireless carriers.

186. The Commission considers that the remaining wholesale roaming caps are a broad measure and, based on a very fulsome examination in this proceeding, do not deal with any identified market problem. In addition, the Commission considers that the continued application of the remaining wholesale roaming caps places an unnecessary and complex administrative burden on wireless carriers.

187. Moreover, the continued application of the remaining wholesale roaming caps will likely have serious negative consequences for certain smaller wireless carriers. For example, these caps enable the national wireless carriers, which have market power in the national market for GSM-based wholesale roaming, to obtain this service from other wireless carriers at capped rates. This will likely negatively impact the bargaining position of wireless carriers when they negotiate in the future with the national wireless carriers for, among other things, access to devices, international roaming services, and spectrum.

188. As noted earlier, the Government of Canada has previously stated that section 27.1 of the Act would remain in place until the Commission makes a decision on wholesale roaming rates. Also, as noted earlier, Parliament provided, through section

241 of the *Economic Action Plan 2014 Act, No. 1*, that section 27.1 of the Act can be repealed by the Governor in Council by way of an Order in Council.

189. Paragraph 7(f) of the Act states that the Canadian telecommunications policy objectives should foster increased reliance on market forces for the provision of telecommunications services and ensure that regulation, where required, is efficient and effective. Further, the Policy Direction states that in exercising its powers and performing its duties under the Act, among other things, the Commission should rely on market forces to the maximum extent feasible.
190. The Commission considers that no compelling evidence was submitted on the record of this proceeding to justify a finding that regulatory oversight is appropriate with respect to the provision of all other wholesale roaming by wireless carriers. Given this, the Commission considers that, consistent with paragraph 7(f) of the Act and the Policy Direction, market forces should apply regarding the provision of all other wholesale roaming. Market forces would allow wireless carriers to negotiate rates for all other wholesale roaming that more accurately reflect the market conditions for these services.
191. In light of the above, the Commission recommends that the Governor in Council repeal section 27.1 of the Act to allow the return to market forces as soon as possible regarding the offering and provision of all other wholesale roaming.

Time-limited application of regulatory measures

192. Bell Mobility submitted that any wholesale obligations that the Commission introduces should be limited in time, and that the Commission should review, for instance in four years, the necessity of wholesale wireless regulations.
193. WIND submitted that the provision of tariffed wholesale roaming should be in place for ten years, with a review commencing in the seventh year.

Commission's analysis and determinations

194. The Commission considers that the regulatory measures it has established in this decision should remain in place for a minimum period of time to allow for the development of sustainable competition, and to encourage continued innovation and investment in high-quality telecommunications facilities in the mobile wireless services market. Accordingly, the Commission **determines** that the regulatory measures established in this decision will remain in place for a minimum of five years, during which time the Commission will monitor competitive conditions in the mobile wireless market.

Policy Direction

195. The Commission considers that the determinations made in this decision are consistent with the Policy Direction for the reasons set out below.

196. The Policy Direction states that the Commission, in exercising its powers and performing its duties under the Act, shall implement the policy objectives set out in section 7 of the Act, in accordance with paragraphs 1(a), (b), and (c) of the Policy Direction.
197. The issues under consideration in this decision relate to whether the wholesale mobile wireless market is sufficiently competitive, and whether any additional regulatory measures are required. Therefore, subparagraphs 1(a)(i) and (ii)³⁹ and subparagraphs 1(b)(i), (ii), and (iv)⁴⁰ of the Policy Direction apply to the Commission's determinations in this decision.
198. Consistent with subparagraph 1(a)(i) of the Policy Direction, the Commission has, with respect to wholesale MVNO access, and tower and site sharing, relied to the maximum extent feasible on market forces by continuing to forbear from the regulation of rates for these services.
199. Consistent with subparagraphs 1(a)(ii) and 1(b)(ii) of the Policy Direction, the Commission considers that the regulatory measures approved in this decision are 1) efficient and proportionate to their purpose, and minimally interfere with market forces, and 2) neither deter economically efficient competitive entry into the market nor promote economically inefficient entry. In this regard, the Commission notes its determinations to require Bell Mobility, RCP, and TCC to file tariffs for the provision of GSM-based wholesale roaming to Canadian wireless carriers other than Bell Mobility, RCP, and TCC.

³⁹ Paragraph 1(a) states that “the Commission should (i) rely on market forces to the maximum extent feasible as the means of achieving the telecommunications policy objectives, and (ii) when relying on regulation, use measures that are efficient and proportionate to their purpose and that interfere with the operation of competitive market forces to the minimum extent necessary to meet the policy objectives.”

⁴⁰ Paragraph 1(b) states, among other things, that “the Commission, when relying on regulation, should use measures that satisfy the following criteria, namely, those that (i) specify the telecommunications policy objective that is advanced by those measures and demonstrate their compliance with this Order, (ii) if they are of an economic nature, neither deter economically efficient competitive entry into the market nor promote economically inefficient entry, [...] and (iv) if they relate to network interconnection arrangements or regimes for access to networks, buildings, in-building wiring or support structures, ensure the technological and competitive neutrality of those arrangements or regimes, to the greatest extent possible, to enable competition from new technologies and not to artificially favour either Canadian carriers or resellers.”

200. In compliance with subparagraph 1(b)(i) of the Policy Direction, the Commission considers that the policy objectives set out in paragraphs 7(a), (b), (c), (f), (g), and (h) of the Act⁴¹ are advanced by the regulatory measures established in this decision.

201. Consistent with subparagraph 1(b)(iv) of the Policy Direction, the Commission considers that its determinations, as they relate to network interconnection arrangements or regimes for access to networks, are technologically and competitively neutral and do not artificially favour either Canadian carriers or resellers.

Secretary General

Related documents

- *Review of wholesale mobile wireless services*, Telecom Notice of Consultation CRTC 2014-76, 20 February 2014, as amended by Telecom Notices of Consultation CRTC 2014-76-1, 25 April 2014; and 2014-76-2, 5 September 2014
- *Wholesale mobile wireless roaming in Canada – Unjust discrimination/undue preference*, Telecom Decision CRTC 2014-398, 31 July 2014
- *Wholesale mobile wireless roaming in Canada – Unjust discrimination/undue preference*, Telecom Notice of Consultation CRTC 2013-685, 12 December 2013
- *Practices and procedures for staff-assisted mediation, final offer arbitration and expedited hearings*, Broadcasting and Telecom Information Bulletin CRTC 2013-637, 28 November 2013
- *CISC consensus report – Canadian International Mobile Subscriber Identity (IMSI) Assignment Guideline (CNRE096A)*, Telecom Decision CRTC 2013-591, 6 November 2013
- *The Wireless Code*, Telecom Regulatory Policy CRTC 2013-271, 3 June 2013
- *Confidentiality of information used to establish wholesale service rates*, Telecom Regulatory Policy CRTC 2012-592, 26 October 2012

⁴¹ The cited policy objectives of the Act are 7(a) to facilitate the orderly development throughout Canada of a telecommunications system that serves to safeguard, enrich, and strengthen the social and economic fabric of Canada and its regions; (b) to render reliable and affordable telecommunications services of high quality accessible to Canadians in both urban and rural areas in all regions of Canada; (c) to enhance the efficiency and competitiveness, at the national and international levels, of Canadian telecommunications; (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; (g) to stimulate research and development in Canada in the field of telecommunications and to encourage innovation in the provision of telecommunications services; and (h) to respond to the economic and social requirements of users of telecommunications services.

- *Revised regulatory framework for wholesale services and definition of essential service*, Telecom Decision CRTC 2008-17, 3 March 2008
- *Review of regulatory framework*, Telecom Decision CRTC 94-19, 16 September 1994

Concurring opinion of Vice-Chairman Peter Menzies

I agree with the Commission's determinations regarding the key issues contemplated in this proceeding.

The core issue at hand and subject to debate was whether certain players within the wireless industry possess market power at the national wholesale level regarding roaming rates, terms, and conditions and, if so, what the appropriate remedy should be.

I agree with the Commission's conclusion that, in accordance with established criteria, Bell Mobility Inc., Rogers Communications Partnership, and TELUS Communications Company (hereafter referred to as Bell, Rogers, and TELUS) possess market power at the national level and should be subject to rate regulation for Global System for Mobile communications (GSM)-based wholesale roaming provided to other wireless carriers. Bell, Rogers, and TELUS have therefore been ordered to file tariffs for these services within six months so that the Commission may determine appropriate final rates. Pending that determination, the Commission has established interim rates that are based on rates currently charged, which by law cannot exceed the caps contemplated by section 27.1 of the *Telecommunications Act* (the Act) [wholesale roaming caps].

I also agree with the Commission's recommendation that, for all other roaming services, including those provided by regional wireless carriers MTS Inc., Saskatchewan Telecommunications, and TBayTel, and new entrants Eastlink, Mobilicity, WIND Mobile, and Videotron G.P., the Governor in Council exercise its prerogative to repeal section 27.1 of the Act. In this way, these carriers, among others, would be able to again operate guided only by market forces and without regulation of their wholesale roaming rates. Pending such action by the Governor in Council, the caps established by section 27.1 will continue to apply.

The analysis as to which carriers, if any, possess market power was complex and required a fulsome examination, but once determined, the remedy was relatively clear.

Once that determination is made, however, one is faced with a conundrum given that the Commission had determined that no carriers other than Bell, Rogers, and TELUS possess market power in the national GSM-based wholesale roaming market.

Section 27 of the Act makes it clear that rates must be just and reasonable. The Policy Direction⁴² makes it clear that the Commission should defer to market forces to the maximum extent possible, and section 27.1 of the Act contemplates that the only means by which the Commission can cause the wholesale roaming caps to be displaced is by establishing an amount within the meaning of subsection 27.1(5). Meanwhile, the Commission's process has determined that there is no identified market problem with respect to the roaming services provided by, among others, the regional carriers and the new entrants.

Specifically, the Commission found no compelling evidence on the record of this proceeding to justify a finding that regulatory oversight is appropriate with respect to the

⁴² *Order Issuing a Direction to the CRTC on Implementing the Canadian Telecommunications Policy Objectives*, P.C. 2006-1534, 14 December 2006

provision of all other wholesale roaming, including by new entrants and regional wireless carriers.

So, what to do about this situation, including with respect to those regional carriers and new entrants that collectively represent a small share of the national market and yet remain subject to the wholesale roaming caps?

The cleanest and most just solution in favour of not just the carriers in question but the public interest at large – which is frequently very well-served by market forces – is the recommendation to the Governor in Council to repeal section 27.1 of the Act.

An alternative approach would be for the parties to negotiate rates on commercial terms and request that the Commission establish them as the amounts which would cause the wholesale roaming caps to be displaced, consistent with the mechanism provided by Parliament in subsection 27.1(5) of the Act.

Under this scenario, in cases where agreements were in existence prior to the implementation of section 27.1 of the Act, parties would remain subject to the caps calculated in accordance with section 27.1 only until such time as they filed those pre-existing agreements for the Commission to consider as the amounts to be established by the Commission within the meaning of subsection 27.1(5). In cases where no previous agreement was in place, the caps calculated pursuant to section 27.1 would remain in effect until parties reached a commercially negotiated agreement, which could then be filed with the Commission with the request that it be established by the Commission within the meaning of subsection 27.1(5).

Furthermore, the Commission could have set a fixed time period – 30, 60, or 90 days, for instance – within which parties without a previous agreement would have to, if they wished to be subject to amounts other than the caps determined pursuant to section 27.1 of the Act, either negotiate an agreement to be filed, with the request that it provide the basis for establishing the amount by the Commission, or apply to the Commission to establish the amount.

A remedy such as this would have been consistent with the mechanism set out in subsection 27.1(5) of the Act by which the wholesale roaming caps can be displaced by an amount established by the Commission. This remedy would have also relieved the regional carriers and new entrants of the handicap of providing roaming for an amount determined through means other than commercial negotiations. And it would have ensured that carriers that do not have market power enjoy a process distinct from those found to have market power.

Further, as noted above, such remedy would be consistent with Parliament's intention that the Commission have the power to displace the wholesale roaming caps by establishing an amount of its own. Further, it would serve the public interest by eliminating uncertainty for regional carriers and new entrants as they seek to compete with the national carriers.

This solution could, of course, be seen as an inefficient workaround that would unnecessarily place the Commission in what some would certainly describe as the philosophically oxymoronic position of regulating/approving the determinations of market forces by retaining regulatory oversight over roaming arrangements. Despite

successful negotiations between parties, the Commission would be obliged to conduct a regulatory process to establish an amount under subsection 27.1(5) of the Act, which, regardless of the current Commission's original intent, would not necessarily be an amount which was negotiated by the parties. This process would call upon Commission resources as well as resources of the carriers involved and other parties that had an interest in the matter. Because this process would be triggered solely to address the issue of the wholesale roaming caps, it could easily be avoided by a repeal of these caps. As such, it would certainly be open to be criticized as an unnecessary red-tape process entailing wasteful resources.

In conclusion, the best, most just outcome based on the evidence of this proceeding that respects the intention of Parliament, the Governor in Council, and the public interest, would be a return to market forces other than for GSM-based wholesale roaming provided by Bell, Rogers, and TELUS to other wireless carriers.

Should the Commission's determinations, with which I agree, not produce the procedural remedy sought, I would hope that the Commission would examine carefully the appropriateness of a process that would cause the wholesale roaming caps to be displaced for all carriers not found to have market power, consistent with the mechanism provided in subsection 27.1(5) of the Act.