



Telecom Decision CRTC 2008-11

Ottawa, 1 February 2008

Regulatory policy

Review of local number portability for voice over Internet Protocol services

Reference: 8663-C12-200707052

In this Decision, the Commission determines that voice over Internet Protocol (VoIP) service providers will continue to be required to port out telephone numbers, assigned from both inside and outside of their operating territory, to other VoIP service providers or to other telecommunications service providers, including local exchange carriers and wireless service providers. Further, the Commission determines that all telephone numbers, whether assigned from inside or outside the company's operating territory, may be ported in at a VoIP service provider's discretion.

The Commission also determines that the local number portability (LNP) rules for VoIP, which include LNP as a condition of forbearance for access-independent VoIP services, will continue to apply equally to all VoIP telephone numbers, whether they are primary or secondary numbers.

Background

1. In Telecom Decision 2007-21 and Telecom Order 2007-109, the Commission considered that further process was required to address the extent to which local number portability (LNP) must be supported for voice over Internet Protocol (VoIP) services. Accordingly, in Telecom Public Notice 2007-7, the Commission initiated a proceeding to address the extent to which LNP functionality must be supported for access-dependent local VoIP services
 - for secondary numbers,¹
 - for telephone numbers assigned from outside a company's operating territory, and
 - with respect to porting-in of telephone numbers.

In Telecom Public Notice 2007-7-1, the Commission widened the scope of the proceeding to include access-independent VoIP services.

2. In Telecom Decision 2005-28, the Commission determined that the obligation established in Telecom Decision 97-8, and subsequent decisions, that all local exchange carriers (LECs) implement LNP functionality applied to all LECs providing local VoIP services. Telecom

¹ For the purpose of this Decision, a secondary number is a VoIP telephone number, associated with a primary number, which can receive but not originate calls.

Decision 97-8 included obligations on LECs to implement the LNP porting-out process and the LNP porting-in process to permit customers to retain their current telephone number when moving to a new local service provider within the same exchange.

3. In Telecom Decision 2006-53, the Commission reaffirmed the regulatory regime for local VoIP services established in Telecom Decision 2005-28,² and denied a request by Bell Canada for the removal of LNP requirements for secondary numbers.
4. Secondary numbers were not available within any tariffed offering at the time Telecom Decision 97-8 was issued. This service feature has been facilitated by VoIP technologies and is now available from many access-independent VoIP service providers as well as from Bell Canada. In particular, Bell Canada offers secondary numbers, from both within and outside its operating territory, as part of its access-dependent (Bell Digital Voice service and Business IP [Internet Protocol] Voice Standard services) and access-independent VoIP offerings.
5. Under the current LNP regime, LNP must be supported for all VoIP telephone numbers, whether primary or secondary, whether in-territory or out-of-territory, and whether access-dependent or access-independent. That regime limits portability to within the exchange.

Process

6. The Commission received submissions and/or comments from Bell Canada, on behalf of itself and Bell Aliant Regional Communications, Limited Partnership (Bell Canada et al.); MTS Allstream Inc. (MTS Allstream); Primus Telecommunications Canada Inc. (Primus); the Public Interest Advocacy Centre (PIAC); Quebecor Media Inc., on behalf of itself and its affiliate Videotron Ltd. (Quebecor); Rogers Communications Inc. (RCI); Saskatchewan Telecommunications (SaskTel); TELUS Communications Company (TCC); and Vonage Canada Corp. (Vonage). The record of this proceeding closed on 26 November 2007. The public record of this proceeding is available on the Commission's website at www.crtc.gc.ca under "Public Proceedings."

Issues

7. The Commission has identified the following three issues to be addressed in its determinations:
 - I. Should porting-out of all VoIP telephone numbers assigned from outside a company's operating territory continue to be mandated?

² In *Order Varying Telecom Decision CRTC 2005-28*, P.C. 2006-1314, dated 9 November 2006, the Governor in Council varied Telecom Decisions 2005-28 and 2006-53 in relation to the regulatory regime for retail local access-independent VoIP services. Specifically, as set out in Telecom Circular 2006-10, the Commission, in relation to retail local access-independent VoIP services provided by incumbent local exchange carriers within their incumbent territories, was to refrain from exercising its powers and performing its duties under section 25, subsections 27(1), (5), and (6), and sections 29 and 31 of the *Telecommunications Act* to the same extent that it does in relation to retail local telecommunications services provided to end-users by competitive local exchange carriers as set out in Telecom Decision 97-8 and subsequent determinations.

II. Should porting-in of telephone numbers be mandated for VoIP service providers?

III. Should the same LNP rules continue to apply to both primary and secondary numbers?

I. Should porting-out of all VoIP telephone numbers assigned from outside a company's operating territory continue to be mandated?

Positions of parties

8. All parties to the proceeding, except Bell Canada et al., submitted that LNP should be required to the maximum extent possible and should include the porting-out of telephone numbers assigned from outside an incumbent local exchange carrier's operating territory. Most parties submitted that
 - mandating LNP for VoIP services would be symmetrical, technologically and competitively neutral, and in conformance with the Governor in Council's Policy Direction (the Policy Direction),³ and
 - market forces could not operate fully if porting-out was not mandated.
9. Quebecor submitted that porting-out of telephone numbers was a basic requirement for effective customer choice and should not be left to the dictates of market forces. PIAC was of the opinion that market forces were not sufficient to ensure LNP, as it was not in the economic interests of those who control access to telephone numbers to permit porting.
10. MTS Allstream, RCI, SaskTel, TCC, and Vonage were of the view that the existing LNP and wireless number portability (WNP) frameworks were based upon the premise that a telephone number was ported from one carrier to another carrier within the telephone number's native exchange, and that using the existing frameworks would address the requirement to support porting-out of all telephone numbers to the greatest extent feasible, including for VoIP telephone numbers, regardless of whether they were assigned from within or outside a company's operating territory.
11. Bell Canada et al. submitted that, in those locations where a service provider offered secondary numbers by obtaining numbering resources from third parties (e.g. LECs) outside of that service provider's operating territory, the implementation of LNP for these telephone numbers typically required more complex operations as the VoIP service provider must implement operational arrangements with the underlying LEC (or numbering resources provider). Bell Canada's experience to date was that where numbering resources were obtained from third-party suppliers, the porting of telephone numbers required substantial manual process and gave rise to operational difficulties as the VoIP service provider was dependent on the third party to provide data to ensure that customer records were up-to-date. Similarly, where

³ *Order Issuing a Direction to the CRTC on Implementing the Canadian Telecommunications Policy Objectives*, P.C. 2006-1534, 14 December 2006

the third party received a port request from another carrier for a telephone number assigned to the VoIP service provider, the VoIP service provider was unaware that a telephone number assigned to its Primary Rate Interface (PRI) service had been ported to another carrier.

12. Primus noted that, as a local reseller, it used the underlying facilities of one or more LECs to permit its VoIP customers to receive calls originating from the public switched telephone network and that these underlying LECs provided telephone numbers and LNP. Primus indicated that it ported out telephone numbers, including secondary numbers, in accordance with Commission rules. Primus submitted that its ability to allow porting-out of telephone numbers was not affected by any implementation constraints or technical issues, other than the requirement that its underlying LEC operate in the exchange and have facilities installed.
13. MTS Allstream and RCI submitted that VoIP resellers should support number portability via contractual arrangements with their underlying LEC.

Commission's analysis and determinations

14. The Commission notes that, in Telecom Order 97-591, it determined that competition in the provision of local exchange services was in the public interest and that LNP was required for effective competition. In Telecom Decision 2005-72, the Commission was of the view that customers should be given the widest possible choice of service providers to meet their needs, and there should be minimal inconvenience, risk, and related costs when changing service providers. The Commission considers that LNP fosters the widest choice of service providers for customers with minimal disruption to them or their business. The Commission thus considers that LNP should be implemented to the greatest degree feasible. The Commission notes that it has previously determined that LNP should be implemented regardless of whether a service provider owns the underlying infrastructure.⁴
15. The Commission acknowledges Bell Canada et al.'s submissions regarding the complexity of operational arrangements and the estimated cost of implementing LNP for out-of-territory and secondary numbers. The Commission notes that other service providers have fully implemented LNP. The Commission is of the view that the costs submitted by Bell Canada et al. to comply with the existing LNP rules do not warrant changing these rules with respect to the porting-out of numbers assigned from out-of-territory.
16. The Commission considers that market forces will not ensure the porting-out of telephone numbers as service providers have no incentives to allow customers to leave; thus, the Commission considers it appropriate in this instance to rely on regulation in order to ensure that number portability is symmetrical and competitively neutral.

⁴ In a letter dated 8 April 1999, the Commission required resellers to release telephone numbers for porting where customers moved to other service providers. In Telecom Decision 2005-28, the Commission determined that the existing LNP rules should apply equally to VoIP service resellers. In Telecom Decision 2005-72, the Commission directed all Canadian wireless carriers, as a condition of providing telecommunications services to wireless resellers and mobile virtual network operators (MVNOs), to incorporate in all existing and future contracts and other arrangements, the requirement that wireless resellers and MVNOs support the porting-in and porting-out of telephone numbers.

17. In light of the above, the Commission determines that VoIP service providers will continue to be required to port out telephone numbers, assigned from both inside and outside their operating territory, to other VoIP service providers or to other telecommunications service providers, including LECs or wireless service providers.

II. Should the porting-in of telephone numbers be mandated for VoIP service providers?

Positions of parties

18. Bell Canada et al., Primus, Quebecor, RCI, and TCC were of the opinion that the porting-in of telephone numbers (primary or secondary) could be left to market forces and should remain an option for a VoIP service provider. SaskTel and Vonage submitted that the porting-in of telephone numbers (primary or secondary) should be left to market forces unless the VoIP service was provided by a competitive local exchange carrier (CLEC) in order to satisfy its CLEC obligations.
19. PIAC submitted that porting-in should be required for all VoIP providers' telephone numbers in any area code where they offered VoIP services.

Commission's analysis and determinations

20. In Telecom Decision 2006-14, the Commission concluded that when local competition was implemented in a small incumbent local exchange carrier's (SILEC) territory, the SILEC must implement an LNP porting-out process; however, it could choose whether to implement the porting-in process.
21. The Commission is of the view that VoIP service providers will support the porting-in of telephone numbers to the extent that customer demand and market forces drive them. In this regard, the Commission is of the view that while the porting-out of telephone numbers makes it less disruptive for a customer to leave a service provider, the porting-in of telephone numbers is a tool for attracting customers. In the Commission's view, service providers who do not support or minimally support porting-in of telephone numbers will self limit their ability to attract new customers.
22. Accordingly, the Commission determines that all telephone numbers, whether assigned from inside or outside the company's operating territory, may be ported in at a VoIP service provider's discretion.

III. Should the same LNP rules continue to apply to both primary and secondary numbers?

Positions of parties

23. Bell Canada et al. submitted that secondary numbers offer different functionality in comparison with primary numbers and thus warranted a different regulatory treatment. Bell Canada et al. provided evidence that Bell Canada had experienced virtually no demand for LNP for secondary numbers and it did not expect the demand to rise. Accordingly, Bell Canada et al. submitted that there was no business case to support the costs associated with the implementation of LNP for secondary numbers.

24. Several parties argued that the distinction between primary numbers and secondary numbers was irrelevant to the issue of portability. Further, RCI, TCC, and Vonage submitted that there were no operational or technical differences between porting a primary or secondary number.

Commission's analysis and determinations

25. The Commission notes that VoIP service providers promote secondary numbers to businesses as a means to create virtual local telephone numbers so clients in locales where a business has subscribed to a secondary number can make calls to that business without incurring long distance charges; therefore, secondary numbers may be crucial to business customers. The Commission also notes that residential customers make use of secondary numbers to, among other things, reduce long distance costs for friends and family or to distinguish incoming calls to individual family members. The Commission therefore considers that secondary numbers are also important to residential customers. Consequently, the Commission is of the view that a customer's inability to retain a secondary number could be a disincentive to changing service providers.
26. In Telecom Decision 2006-28, the Commission noted that it was the telephone numbers that were portable, not the services themselves. The Commission determined that WNP applied to 10-digit telephone numbers that were, for the most part, associated with dialable real-time voice communication service. The Commission is of the view that this situation also applies to VoIP telephone numbers and that regardless of whether the telephone number is associated with a primary number service or a secondary number service as defined by a particular service provider, it is the 10-digit telephone number that is portable.
27. The Commission notes that while Bell Canada's experience has been that the demand for secondary numbers is very low, the experience of other carriers has not been the same. For example, Vonage and Primus noted that secondary numbers are an important service feature of their VoIP service offering and that customers expect number portability. The Commission also considers that the VoIP services market is still in the early stages of customer adoption and that, as noted by PIAC, it is likely that the number of portability requests for VoIP telephone numbers will approximate those historically seen in wireline as the VoIP market matures. The Commission considers that eliminating or altering the LNP rules based on the different marketing approaches of service providers is inappropriate.
28. In the Commission's view, customers should have access to the widest possible choice of service providers to meet their needs, and there should be minimal inconvenience, risk, and related costs when changing service providers. Accordingly, the Commission determines that the LNP rules for VoIP, which include LNP as a condition of forbearance for access-independent VoIP services, will continue to apply equally to all VoIP telephone numbers, whether they are primary or secondary numbers. The Commission notes that this determination applies to Bell Canada's Bell Digital Voice Service and Bell Canada et al.'s Business IP Voice Standard service, and will be taken into account in the proceedings to finalize these tariff offerings.

Secretary General

Related documents

- *Review of local number portability for voice over Internet Protocol services*, Telecom Public Notice CRTC 2007-7, 8 May 2007, as amended by Telecom Public Notice CRTC 2007-7-1, 27 July 2007
- *Bell Digital Voice Service*, Telecom Decision CRTC 2007-21, 5 April 2007
- *Bell Canada and Bell Aliant Regional Communications, Limited Partnership – Business IP Voice Standard service*, Telecom Order CRTC 2007-109, 5 April 2007
- *Access-independent VoIP services pursuant to Order in Council P.C. 2006-1314*, Telecom Circular CRTC 2006-10, 16 November 2006
- *Reconsideration of Regulatory framework for voice communication services using Internet Protocol*, Telecom Decision CRTC 2006-53, 1 September 2006
- *Regulatory issues related to the implementation of wireless number portability – Follow-up to Public Notice 2006-3*, Telecom Decision CRTC 2006-28, 18 May 2006
- *Revised regulatory framework for the small incumbent local exchange carriers*, Telecom Decision CRTC 2006-14, 29 March 2006
- *Implementation of wireless number portability*, Telecom Decision CRTC 2005-72, 20 December 2005
- *Regulatory framework for voice communication services using Internet Protocol*, Telecom Decision CRTC 2005-28, 12 May 2005, as amended by Telecom Decision CRTC 2005-28-1, 30 June 2005
- *Commission Letter Re: Local Competition, Telecom Decision CRTC 97-8, 1 May 1997 (Decision 97-8): Follow-Up Process – CRTC Interconnection Steering Committee Consensus Items*, 8 April 1999
- *Local Competition*, Telecom Decision CRTC 97-8, 1 May 1997
- *Responsibility for Carrier Specific Costs for the Provision of Local Number Portability*, Telecom Order CRTC 97-591, 1 May 1997

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