



## Telecom Decision CRTC 2016-345

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Ottawa, 26 August 2016

*File number: 8698-T66-201503996*

### **TELUS Communications Company – Application to establish a special location porting zone within the Metro Vancouver area**

*The Commission **approves** TCC's application to establish a special location porting zone (LPZ) within the Metro Vancouver area. This will enable residential and business subscribers to keep their telephone numbers when moving to a new address within this extended area.*

*The Commission **directs** carriers to implement TCC's proposed LPZ within **three months** of the date of this decision. Additionally, the Commission allows wireline local exchange carriers and wireless carriers the option to assign telephone numbers anywhere in the LPZ.*

#### **Background**

1. Local number portability (LNP) enables subscribers to keep the same telephone number when changing service providers. The Commission required all wireline local exchange carriers (LECs) to implement LNP as part of its framework for local competition established in Telecom Decision 97-8.
2. In Telecom Decision 2005-28, the Commission determined that the obligation established in Telecom Decision 97-8 that all wireline LECs implement LNP also applied to LECs providing local voice over Internet Protocol (VoIP) services.
3. In Telecom Decision 2005-72, the Commission required wireless carriers to support LNP and determined that the exchange remained central to the porting process – specifically, that
  - the porting of telephone numbers between wireless carriers is permitted regardless of a subscriber's physical location or billing address, as long as the ported telephone number maintains its original telephone exchange designation for rating purposes;
  - the porting of telephone numbers between wireline-based carriers and wireless carriers is permitted as long as the telephone number maintains its original telephone exchange/rate centre designation for rating purposes; and

- wireline-based carriers may accept or deny the porting of telephone numbers from wireless carriers when a customer's location is outside the area of the telephone exchange associated with a ported telephone number.

## Application

4. The Commission received an application from TELUS Communications Company (TCC), dated 1 May 2015, in which the company requested permission to port telephone numbers between 17 exchanges in the Metro Vancouver area<sup>1</sup> through the establishment of a special location porting zone (LPZ). The company submitted that this would enable residential and business subscribers to keep their telephone numbers when moving to a new address in a different exchange within the LPZ, without changing their wireline telephone service.
5. TCC identified characteristics and technical prerequisites that would facilitate the implementation of its proposed LPZ. For example, TCC noted that all 17 exchanges in the proposed LPZ
  - have every LPZ exchange within their local calling area, and toll rates are insensitive to where in the LPZ a toll call originates or terminates;
  - are within the same local interconnection region;
  - are served by the same access tandem switches;
  - are served by a single public safety answering point (PSAP);<sup>2</sup>
  - have LNP; and
  - contain a significant combined population of over two million residents and thousands of businesses.
6. TCC also identified activities that it or other service providers must complete to implement the proposed LPZ, along with possible issues and associated potential solutions.
7. TCC submitted that wireline LECs are at a disadvantage when competing with wireless and access-independent VoIP service providers for the same set of customers. The company indicated that when LNP was restricted to the exchange for all carriers, location portability<sup>3</sup> beyond the exchange boundary was not a barrier to

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<sup>1</sup> These exchanges are Bowen Island, Cloverdale, Fort Langley, Haney, Ladner, Langley, New Westminster, Newton, North Vancouver, Pitt Meadows, Port Coquitlam, Port Moody, Richmond, Vancouver, West Vancouver, Whalley, and White Rock, British Columbia.

<sup>2</sup> A PSAP receives 9-1-1 emergency telephone calls and then dispatches the appropriate emergency service responders.

<sup>3</sup> Location portability permits a subscriber to keep the same telephone number when moving to a new address within an incumbent local exchange carrier exchange.

effective competition because an end-user had to accept a number change regardless of which service provider was chosen in the new location. TCC submitted that this is no longer the case since customers may transfer their number to an access-independent VoIP service provider or a wireless carrier and continue to use that number in the new location.<sup>4</sup>

8. TCC proposed that all service providers bear their own costs, if any, for the implementation of location portability within the proposed LPZ, and for operating their networks in the new environment. TCC submitted that it did not plan to raise retail prices due to the cost of implementing location portability within the LPZ, nor did it plan to charge additional fees to customers who take advantage of the capability.
9. TCC requested that
  - location portability within the LPZ be established effective 1 November 2015 or three months following the date of the Commission's approval of its proposal, whichever is later, to enable service providers to accommodate location portability;
  - the CRTC Interconnection Steering Committee (CISC) amend industry guidelines and agreements as required to permit location portability within the proposed LPZ;
  - service providers be required to allow the porting out of numbers associated with a new service address within the LPZ;
  - service providers route calls correctly to numbers ported to a new exchange within the LPZ; and
  - service providers be permitted to offer local service with location portability within the LPZ, should they so choose.
10. TCC submitted that if the Commission approved its application, it would file a tariff notice to formally indicate which exchanges are in the LPZ.
11. The Commission received interventions regarding TCC's application from Bell Canada; the Canadian Network Operators Consortium Inc. (CNOC); MTS Inc. and Allstream Inc. (collectively, MTS Allstream); Rogers Communications Partnership (RCP);<sup>5</sup> and Shaw Telecom G.P. (Shaw); as well as the Consumers' Association of Canada, the Council of Senior Citizens' Organizations of British Columbia, and the Public Interest Advocacy Centre (collectively, the

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<sup>4</sup> Note that the telephone number retains the characteristics and location of its original exchange, and not those of the customer's new location.

<sup>5</sup> Submissions were received from RCP. However, on 1 January 2016, RCP ceased to exist. All of RCP's business activities, including its assets and liabilities, are now held by Rogers Communications Canada Inc.

Consumer Groups). The public record of this proceeding, which closed on 19 December 2015, is available on the Commission's website at [www.crtc.gc.ca](http://www.crtc.gc.ca) or by using the file number provided above.

## **Issues**

12. The Commission has identified the following issues to be addressed in this decision:

- Should the Commission approve the proposed LPZ?

If so,

- Should location portability within the proposed LPZ be mandatory?
- Should LECs be allowed to assign numbers anywhere in the proposed LPZ?
- What would be an appropriate time frame for implementation?

## **Should the Commission approve the proposed LPZ?**

### **Positions of parties**

13. CNOC, the Consumer Groups, MTS Allstream, RCP, and Shaw generally supported TCC's proposed LPZ.
14. However, CNOC requested that TCC explain why it had proposed the LPZ rather than exchange consolidation. It also requested that TCC clarify how its proposal would affect certain VoIP platforms and associated regulations – for example, regarding 9-1-1 service. Further, CNOC submitted that many of its member service providers route 3-1-1 calls based on the originating telephone number rather than the municipality associated with the caller's location. CNOC indicated that, as a result, the proposed LPZ could lead to technical difficulties in routing 3-1-1 calls for these members.
15. The Consumer Groups submitted that the Commission should also consider how to extend the benefits that more broadly available LNP could deliver to competition and to consumers in other locations in Canada. They noted that they were concurrently filing an application requesting that the Commission consider expanding the boundaries of LNP.<sup>6</sup>
16. Shaw agreed that TCC's proposal would benefit consumers, but noted that its systems and processes would need to be reviewed and changed.
17. Although Bell Canada did not identify any significant operational concerns with TCC's proposed LPZ, it requested that the Commission refer TCC's application to

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<sup>6</sup> The Consumer Groups' proposal is addressed in Telecom Decision 2016-346, also issued today.

CISC for a thorough assessment of the technical implications of the proposed LPZ for industry numbering systems, guidelines, processes, and databases. However, Bell Canada stated that it appeared that the proposed LPZ could be implemented with relatively lower costs than those that would be incurred in other geographic areas.

18. In response to CNOC, TCC submitted that it had considered exchange consolidation and explained why that option would be more complex and disruptive than its current proposal. It also submitted that its proposed LPZ would enable wireline LECs to offer service with non-native numbers and that all 9-1-1 calls originating in the proposed LPZ would be routed to the same existing single PSAP, regardless of the service address for a number within the LPZ.
19. TCC submitted, further, that even for VoIP fixed/native services, routing 3-1-1 calls by originating number is an issue for municipalities that have no associated exchanges. TCC added that among the municipalities within the proposed LPZ, only Vancouver currently uses 3-1-1 service. In TCC's view, any shortcomings in the routing of 3-1-1 calls by originating number exist already, and would not be caused or made worse by its proposed LPZ.
20. TCC noted that CISC's major contributors are already parties to the proceeding and that no other party argued that further study was required. However, TCC proposed that the Commission direct CISC to amend industry guidelines and agreements as required to permit location portability within its proposed LPZ.

#### **Commission's analysis and determinations**

21. Implementation of the proposed LPZ would increase substitutability and competition between wireline, wireless, and VoIP telephone service providers operating within the Metro Vancouver area. Subscribers would avoid the costs associated with other options to retain their phone numbers when changing their addresses beyond their original exchange. Implementation of the proposed LPZ would also be consistent with the Commission's previous decisions and policies aimed at increasing local competition through number portability.<sup>7</sup>
22. The Commission is satisfied that there are no outstanding issues regarding the provision of 9-1-1 services in the LPZ and that approval of TCC's application would not create any new 3-1-1 call routing issues. Regarding the existing issue of 3-1-1 call routing, carrier-specific solutions to this issue are beyond the scope of the current proceeding.
23. Parties did not raise material concerns about cost or complexity as a serious impediment to the implementation of the proposed LPZ. The Commission agrees with TCC's assessment of the characteristics that facilitate the proposed LPZ and considers that the issues raised have been adequately addressed. Accordingly, it is appropriate to implement the proposed LPZ.

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<sup>7</sup> See Telecom Order 97-591, and Telecom Decisions 2005-72 and 2008-11.

## **Should location portability within the proposed LPZ be mandatory?**

### **Positions of parties**

24. TCC proposed to make location portability optional for LECs within the LPZ, allowing market forces to drive implementation. RCP supported this proposal. However, the Consumer Groups submitted that leaving implementation to individual service providers would create confusion, and likely unnecessary complexity for consumers. They added that consumers in the LPZ should not have to ask their service provider whether and where it supports number portability.

### **Commission's analysis and determinations**

25. In Telecom Decision 2008-11, the Commission determined that all telephone numbers, whether assigned from inside or outside a VoIP service provider's operating territory, could be ported in at the provider's discretion. However, the Commission considered that market forces would not ensure the porting-out of telephone numbers since service providers have no incentive to allow customers to leave. The Commission therefore determined that VoIP service providers should continue to be required to port out telephone numbers.
26. Similarly, it is appropriate in this case for the Commission to mandate the porting-out of telephone numbers within the LPZ, but to allow individual wireline LECs and wireless carriers to determine whether they wish to port in. However, if the new service location is within the home exchange, porting-in continues to be mandatory. In addition, all carriers are to ensure that outbound calls are properly routed to ported numbers within the LPZ.

## **Should LECs be allowed to assign numbers anywhere in the proposed LPZ?**

### **Positions of parties**

27. MTS Allstream submitted that there would be additional number conservation benefits if LECs were allowed to assign new numbers anywhere in the LPZ. They proposed that if a LEC has an NXX code from which it currently assigns numbers in an exchange within the proposed LPZ, that LEC should be able to assign such numbers in another exchange within the LPZ without acquiring another NXX code for that exchange.
28. Shaw noted that some customers, when faced with restrictions on their ability to port telephone numbers, subscribe to a number forwarding service, thereby consuming additional numbering resources.
29. TCC submitted that LECs assigning numbers (non-native and non-ported) in any location within the LPZ may face a call routing efficiency issue when calls are made to LECs with more than a single switch serving a local interconnection region.
30. However, TCC submitted that if LECs interested in assigning non-native and non-ported numbers in any location within the LPZ were to enter those numbers into the

Number Portability Administration Centre (NPAC) database, it expected that no changes to that database or associated processes would be required, and that no associated costs should be incurred except the normal per-transaction charges for entering a record.

#### **Commission's analysis and determinations**

31. There could be additional number conservation benefits if LECs were permitted to assign numbers to customers in any location within the LPZ; therefore, it is appropriate to allow them to do so. However, to reduce network inefficiencies in cases where more than a single switch is involved in call routing, if the number is assigned to an end-user in an exchange that is served by a switch in another exchange, the LEC assigning the number must enter it into the NPAC database.

#### **What would be an appropriate time frame for implementation?**

##### **Positions of parties**

32. TCC requested that the proposed LPZ be established effective 1 November 2015 or three months following the date of the Commission's approval of its proposal, whichever is later.
33. RCP submitted that it preferred the proposed LPZ to be implemented three months following the date of the Commission's approval to allow sufficient time for service providers to make the necessary changes.
34. Shaw requested that the LPZ be introduced 12 months following the Commission's approval, given the amount of work it considered to be required. Shaw submitted that it would need to undertake significant work to modify its local number porting systems, basic listing interchange file databases, and number inventory systems to ensure that there is no effect on customers, directory publishers, or industry partners.
35. TCC replied that only Shaw had proposed a longer implementation period and, given the required system changes identified by Shaw, the 12-month period seemed to be required for Shaw to offer its retail services with location portability, not for the company to accommodate location portability within the LPZ. However, TCC acknowledged that it did not know all of the operational implications of the proposed LPZ in terms of networks and service adjustments for other industry players.

#### **Commission's analysis and determinations**

36. Based on the record of this proceeding, three months following the date of this decision is a reasonable and appropriate amount of time for the implementation of the LPZ.

## Conclusions

37. In light of all the above, the Commission **approves** TCC's application, with an effective date of **three months** from the date of this decision. The Commission therefore
- **directs** carriers to implement TCC's proposed LPZ within **three months** of the date of this decision, which includes the requirement for LECs and wireless carriers to port out telephone numbers within the LPZ and for all carriers, including interexchange carriers, to route outbound calls properly to ported numbers within the LPZ;
  - permits individual LECs and wireless carriers to determine whether they wish to port in telephone numbers if the new service location is outside the home exchange; however, if the new service location is within the home exchange, porting-in remains mandatory;
  - allows LECs and wireless carriers the option to assign numbers anywhere in the LPZ, with the appropriate information entered into the applicable numbering and routing databases to ensure that calls can be properly routed; and
  - **directs** TCC to file a tariff notice within **30 days** of the date of this decision reflecting the determinations set out in this decision, including identifying which exchanges are in the LPZ.
38. The Commission also requests that CISC amend the relevant industry guidelines and agreements to reflect the determinations set out in this decision.

## Policy Direction

39. The Policy Direction<sup>8</sup> states that the Commission, in exercising its powers and performing its duties under the *Telecommunications Act* (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.
40. The Commission considers that allowing LECs and wireless carriers to decide whether to port in numbers, but requiring them to port out numbers is consistent with subparagraphs 1(a)(i) and 1(a)(ii)<sup>9</sup> of the Policy Direction. As well, allowing LECs and wireless carriers the option to assign numbers anywhere in the LPZ is also

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<sup>8</sup> *Order Issuing a Direction to the CRTC on Implementing the Canadian Telecommunications Policy Objectives*, P.C. 2006-1534, 14 December 2006

<sup>9</sup> The cited policy objectives are 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.

consistent with subparagraph 1(a)(i) of the Policy Direction. Finally, the approval of the proposed LPZ is consistent with paragraphs 7(c) and 7(h) of the Act.<sup>10</sup>

Secretary General

### **Related documents**

- *The Consumers' Association of Canada, the Council of Senior Citizens' Organizations of British Columbia, and the Public Interest Advocacy Centre – Application to expand the current geographic boundaries associated with local number portability*, Telecom Decision CRTC 2016-346, 26 August 2016
- *Review of local number portability for voice over Internet Protocol services*, Telecom Decision CRTC 2008-11, 1 February 2008
- *Implementation of wireless number portability*, Telecom Decision CRTC 2005-72, 20 December 2005
- *Regulatory framework for voice communication services using Internet Protocol (VoIP)*, Telecom Decision CRTC 2005-28, 12 May 2005; as amended by Telecom Decision CRTC 2005-28-1, 30 June 2005
- *Responsibility for carrier specific costs for the provision of local number portability*, Telecom Order CRTC 97-591, 1 May 1997
- *Local competition*, Telecom Decision CRTC 97-8, 1 May 1997

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<sup>10</sup> The cited policy objectives are 7(c) to enhance the efficiency and competitiveness, at the national and international levels, of Canadian telecommunications; and 7(h) to respond to the economic and social requirements of users of telecommunications services.