



## Telecom Regulatory Policy CRTC 2013-711

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Route reference: Telecom Notice of Consultation 2012-669, as amended

Ottawa, 18 December 2013

### **Northwestel Inc. – Regulatory Framework, Modernization Plan, and related matters**

File numbers: 8663-C12-201215302, 8695-J64-201209578, and 8662-N1-201305821

*Northwestel provides telecommunications services throughout Canada's three territories and parts of northern Alberta and British Columbia, covering four million square kilometres and four time zones. Its operating territory has a population of 121,000 in 96 communities.*

*The Commission's determinations in this decision are the result of a public proceeding to review issues associated with Northwestel's regulatory framework, including an oral hearing held in both Inuvik, Northwest Territories and Whitehorse, Yukon. As part of this process, the Commission, among other things, reviewed Northwestel's five-year, \$233 million plan to modernize its network infrastructure, looked at whether any modifications were needed to the subsidy regime for telecommunications services in the North, re-examined the company's approved Wholesale Connect service rates, and considered whether the rates for certain services should be regulated.*

*The Commission made its determinations with the view to achieving various objectives, including improved broadband Internet services and increased availability of advanced mobile wireless services, so that northern Canadians receive telecommunications services comparable to those available to other Canadians. The Commission considers that investing in transport upgrades, particularly in communities served by satellite services, is an important priority for telecommunications development in the North and is required to meet the growing demands of northern Canadians.*

*Although the implementation of Northwestel's Modernization Plan will contribute to achieving these objectives, the Commission is of the view that it will not be possible for Northwestel alone to deliver the telecommunications services needed by Canadians across the company's vast operating territory. Accordingly, the Commission will launch in 2014 1) an inquiry on satellite transport services offered in Canada, and 2) a proceeding in which, among other things, it intends to establish a mechanism to fund infrastructure investment in transport facilities in Northwestel's operating territory. This mechanism would complement other investments from the private sector and governments, including public-private partnerships.*

*In addition, the Commission, among other things,*

- determines that price cap regulation using the current basket structure and pricing constraints, subject to the adjustments outlined in this decision, continues to be the appropriate form of regulation for Northwestel's tariffed services, and the regime will be in effect for the next four years;*
- determines that the rollout of Northwestel's Modernization Plan will be monitored to ensure that the implementation targets are being met and that consumers in Northwestel's operating territory benefit from the regulatory framework set out in this decision;*
- modifies the rates for Northwestel's Wholesale Connect service previously approved in Telecom Order 2013-93 to more appropriately balance the need to ensure that Northwestel is reasonably compensated for its costs and continues to invest in its fibre networks with the need to ensure that competitors provide competitive alternatives in the marketplace; and*
- decides to regulate Northwestel's rates for retail Internet and Ethernet Wide Area Network services in terrestrially served communities in light of its findings that Northwestel has significant market power in the markets for these services.*

## **Background**

1. Northwestel Inc. (Northwestel), a subsidiary of BCE Inc. (BCE), provides a wide range of telecommunications services (e.g. local, long distance, Internet, wireless) in Yukon, Northwest Territories, and Nunavut, as well as parts of northern British Columbia and Alberta. Northwestel is the incumbent provider of local telephone services in its operating territory and the rates for these services are regulated by the Commission. The rates for most other telecommunications services offered by Northwestel are not regulated.
2. In Telecom Regulatory Policy 2011-771, the Commission stated, among other things, that it was concerned that Northwestel had failed to make the necessary upgrades to its network, as evidenced by the company's aging infrastructure and the unavailability of certain services in many remote communities that are comparable to those provided in the rest of Canada.
3. As such, the Commission directed Northwestel to develop and file a comprehensive plan to modernize its network infrastructure. The plan was to address how Northwestel intended to update its infrastructure in a timely manner and ensure that northern customers receive telecommunications services, both regulated and forborne, comparable to those available in southern Canada in terms of choice, quality, and reliability. The plan was to also address how the company intended to fund or finance the costs to modernize its network.

4. The Commission determined that additional regulatory oversight was required, concluding that a holistic review of Northwestel's regulatory framework and telecommunications services was required to ensure that northern Canadians realize the benefits of price cap regulation.<sup>1</sup> Consequently, the Commission extended Northwestel's price cap regulatory framework with minor modifications<sup>2</sup> for two years, effective 1 January 2012, pending the holistic review.
5. The Commission also determined that local competition should be introduced in Northwestel's operating territory in order to provide Canadians who reside in the North with a choice of service providers and different service options.

## **Events prior to the proceeding**

### ***Modernization Plan***

6. Pursuant to Telecom Regulatory Policy 2011-771, Northwestel filed its proposed Modernization Plan (the Plan) in July 2012. The Plan, among other things, identified investments in upgrades that the company planned to implement over a five-year period to modernize its infrastructure and deliver new services across its operating territory.
7. A portion of Northwestel's July 2012 Plan was contingent on the Commission's approval of the proposed acquisition of Astral Media Inc. (Astral) by BCE.<sup>3</sup> In Broadcasting Decision 2012-574, the Commission denied the application by BCE for authority to change the effective control of Astral's broadcasting undertakings. Consequently, Northwestel was required to file an update to its Plan, as discussed below.

### ***Ice/Iristel application***

8. In an application dated 8 August 2012, Ice Wireless Inc. (Ice Wireless) and Iristel Inc. (Iristel) [collectively, Ice/Iristel], among other things, proposed a new approach to funding telecommunications services in Northwestel's operating territory that would replace the existing subsidy regime used to support Northwestel's primary exchange services (PES).<sup>4</sup>
9. By letter dated 23 August 2012, the Commission stated that it would be premature to consider, prior to the review of Northwestel's regulatory framework, any changes proposed by Ice/Iristel to the subsidy regime.

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<sup>1</sup> Price cap regulation, which only applies to Northwestel's tariffed services, generally places upward constraints on prices that the company can charge its customers. Because this regulatory framework focuses on prices of services as opposed to a specific rate of return earned by the company, detailed analysis of revenues, expenses, and capital plans of a company are generally not required by the Commission.

<sup>2</sup> See Appendix 1 of Telecom Regulatory Policy 2011-771 for more details.

<sup>3</sup> On 16 March 2012, BCE announced that it had signed a definitive agreement to acquire all Astral's assets and shares.

<sup>4</sup> See paragraph 110 of this decision for additional details of the proposal.

## Telecom Notice of Consultation 2012-669

10. With the issuance of Telecom Notice of Consultation 2012-669 in December 2012, the Commission initiated a review of Northwestel's Plan and regulatory framework. Specifically, the Commission sought comments on the following:
  - a. whether the Plan appropriately addresses the concerns raised in Telecom Regulatory Policy 2011-771, including the needs of northern residents;
  - b. whether price cap regulation continues to be the appropriate form of regulation for Northwestel's tariffed services, and, if not, what the appropriate form of regulation should be in order to address the concerns raised in Telecom Regulatory Policy 2011-771 and to meet the policy objectives of the *Telecommunications Act* (the Act);
  - c. if price cap regulation continues to be appropriate, what changes, if any, should be made to the framework to address the concerns raised in Telecom Regulatory Policy 2011-771 and to meet the policy objectives of the Act;
  - d. whether the existing subsidy regime for telecommunications services continues to be appropriate for Northwestel's operating territory or whether any modifications to either the amount of subsidy or the subsidy regime itself in the North are needed;
  - e. what would be the appropriate local service forbearance framework for Northwestel, including the specific criteria for granting forbearance; and
  - f. whether any changes are required for services used by Northwestel's competitors to provide retail services to their customers, as well as whether Northwestel should be required to provide other services to competitors to facilitate the implementation of local competition.<sup>5</sup>
11. The portion of Ice/Iristel's August 2012 application regarding changes to the funding of telecommunications services in Northwestel's operating territory was made part of the record of this proceeding. Further, Northwestel was directed to file any updates to its Plan.
12. In an application dated 11 April 2013, Northwestel requested that the Commission review and vary certain determinations made in Telecom Order 2013-93 regarding the company's Wholesale Connect service.<sup>6</sup> Northwestel stated that the Wholesale Connect service rates approved in Telecom Order 2013-93 were significantly below

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<sup>5</sup> In Telecom Notice of Consultation 2012-669-1, among other things, the Commission stated that it would also consider the pricing policy, including markups, associated with any new service requested by competitors.

<sup>6</sup> Wholesale Connect service is a backbone service that enables competitors to transport telecommunications traffic across Northwestel's Internet Protocol network at various speeds and to interconnect with other carriers in southern Canada.

the rates proposed by the company and had forced it to cancel or suspend plans for future fibre builds proposed in its Plan.<sup>7</sup>

13. Given the interdependencies of the issues set out in Telecom Notice of Consultation 2012-669 and in Northwestel's review and vary application regarding Wholesale Connect service, the Commission found it appropriate to expand the scope of this proceeding to consider the company's review and vary application.<sup>8</sup>

### **The proceeding**

14. Parties that participated in the proceeding included Northwestel, Arctic Fibre Inc. (Arctic Fibre), the Dakwakada Development Corporation (DDC), Eeyou Communications Network (Eeyou), First Mile Connectivity Consortium (First Mile), the Government of the Northwest Territories (GNWT), the Government of Nunavut (GN), Ice/Iristel, Juch-Tech Inc. (Juch-Tech), MTS Inc. and Allstream Inc. (Allstream), the Northwest Territories Chamber of Commerce (NWTCC), the Nunavut Broadband Development Corporation (NBDC), the Public Interest Advocacy Centre (PIAC), on behalf of itself and the Consumers' Association of Canada, the SSi Group of Companies (SSi), TELUS Communications Company (TCC), the Utilities Consumers' Group (UCG), and Yukon Government (YG). In addition, over 300 interventions were received from customers, businesses, communities, and other organizations.
15. The proceeding included a public hearing, which began on 17 June 2013 with a one-day session in Inuvik, Northwest Territories, and reconvened on 19 June 2013 in Whitehorse, Yukon for two days. The public record of this proceeding, which closed on 8 July 2013, is available on the Commission's website at [www.crtc.gc.ca](http://www.crtc.gc.ca) under "Public Proceedings" or by using the file numbers provided above.

### **Objectives of the decision**

16. The Commission considers that modern telecommunications services are necessary for economic development in the North and are needed by northern Canadians to participate in the digital economy to the same level as southern Canadians. The Commission is of the view that there is a need for reliable, affordable telecommunications services of high quality in the many small and remote communities in Northwestel's operating territory. The ability to access services such as health care, education, government programs, and banking is vital to consumers in these communities.

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<sup>7</sup> See paragraphs 132 to 156 for further details on this application.

<sup>8</sup> See Telecom Notice of Consultation 2012-669-2.

17. 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,<sup>9</sup> were made with a view to achieving the following objectives:
- to ensure that northern Canadians have access to telecommunications services that are as comparable as possible to those provided to southern Canadians, in particular improved broadband Internet services and increased availability of advanced mobile wireless services;
  - to ensure that there is a consistent level of reliable and high-quality services at reasonable prices across all of Northwestel's operating territory;
  - to encourage Northwestel to continue to invest in modernizing its infrastructure, in particular transport facilities, while providing competitors with access to transport infrastructure at reasonable rates in order to foster competition; and
  - to implement a regulatory framework for Northwestel that minimizes regulatory burden and provides flexibility in the pricing of services, to the greatest extent possible and based on the unique circumstances in the North.

### **Structure of this decision**

18. The Commission's determinations in this decision are set out in the following sections:
- I. Modernization Plan
  - II. Subsidy
  - III. Services used by competitors
  - IV. Regulation of certain retail services
  - V. Local forbearance framework
  - VI. Regulatory framework and pricing flexibility for tariffed services
  - VII. Monitoring of the Modernization Plan

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<sup>9</sup> *Order Issuing a Direction to the CRTC on Implementing the Canadian Telecommunications Policy Objectives*, P.C. 2006-1534, 14 December 2006

## I. Modernization Plan

### Scope of the Plan

19. The Plan, as filed by Northwestel on 15 February 2013, proposed capital expenditures of \$233 million<sup>10</sup> over the period of 2013 to 2017 and included the following major initiatives:
- the installation in 60 of its 96 communities of new switches that will support enhanced calling features (ECFs),<sup>11</sup> high-speed Internet services, local number portability (LNP),<sup>12</sup> and local network interconnection;
  - the extension of fourth-generation (4G) wireless services to 83 communities;
  - the upgrade of transport facilities (both terrestrial and satellite), and the increase of backbone diversity;
  - the upgrade and expansion of high-speed Internet services across its operating territory; and
  - the implementation of other projects, including replacing its satellite voice network with an Internet Protocol (IP)-based network, replacing the SR500 voice system,<sup>13</sup> replacing fuel storage systems, and upgrading and replacing business systems.
20. Northwestel submitted that, in developing the Plan, it sought to satisfy the Commission's regulatory objectives, such as the basic service objective (BSO),<sup>14</sup> as well as the market demands of its customers and the company's customer service goals and objectives.
21. The GNWT and YG acknowledged that the Plan represents an improvement for northern customers, while the NWTCC submitted that the Plan demonstrates a reasonable compliance with the Commission's directives. The DDC submitted that the Plan addresses many of the needs of communities outside Whitehorse.

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<sup>10</sup> In April 2013, Northwestel revised its transport infrastructure initiatives based on the impact of Telecom Order 2013-93 (see paragraph 26 for further details) and revised its Plan expenditures to \$220.4 million.

<sup>11</sup> ECFs include services such as call privacy, call waiting, and three-way calling. This initiative would result in access to these services for all customers in Northwestel's operating territory.

<sup>12</sup> LNP allows customers who choose to change their local service provider to retain their telephone numbers via the number portability process.

<sup>13</sup> SR500 is a subscriber radio access network system.

<sup>14</sup> The BSO consists of the following: individual line local Touch-Tone service; access to low-speed Internet at local rates; access to the long distance network and to operator/directory assistance services; ECFs, including access to emergency services, voice message relay service, and privacy protection features; and a printed copy of the current local telephone directory upon request.

22. However, the GN, YG, and PIAC generally submitted that the Plan is inadequate because it does not meet the Commission's objective of providing services to Canadians in the North, both regulated and forborne, comparable to those available in southern Canada in terms of choice, quality, and reliability. The GN also submitted that, of the areas identified by Northwestel for modernization, only two clearly have an impact on and benefit for Nunavut: 4G wireless upgrades and satellite voice replacement.
23. No significant comments or concerns were raised by interveners regarding certain other initiatives proposed by Northwestel as part of its Plan, such as the replacement of its aging satellite voice system and the SR500 radio system, upgrading and replacing business systems, and upgrading its fuel storage systems.
24. Although a number of parties to the proceeding acknowledged that implementation of the Plan would provide many enhancements to northerners (for example, providing access to faster Internet and better wireless services, as well as connecting communities and improving the day-to-day lives of northern residents), several concerns were identified with respect to certain aspects of Northwestel's proposal. These concerns, in particular those related to the company's transport infrastructure, the provision of broadband Internet services to satellite-served communities,<sup>15</sup> the lack of redundancy in the network, the implementation of fixed wireless switches, and the financing of the Plan are discussed below.

## **Transport**

25. Generally, interveners acknowledged that transport infrastructure, and in particular satellite transport and the associated cost of provisioning services over satellite, is a concern in the North.
26. Under the Plan, Northwestel had initially proposed to invest \$67.7 million for transport upgrades, including expanding its microwave transport facilities and fibre infrastructure. As noted earlier, Northwestel cancelled or suspended plans for future fibre builds proposed in its Plan in light of the Wholesale Connect service rates approved in Telecom Order 2013-93. Northwestel stated that it would instead invest in other types of technologies. Further, Northwestel submitted that, if there was a favourable outcome to its review and vary application regarding Telecom Order 2013-93, the company would restore all fibre investments in the Plan.
27. YG and PIAC submitted that Northwestel's planned investments do not recognize transport as a priority. YG further submitted that bringing sufficient transport capacity to the telecommunications network in the North, particularly on key backbone routes, will help to "future proof" the network.
28. SSi submitted that the overriding needs in the North are for reliable and affordable transport infrastructure capable of meeting the growing capacity demands for

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<sup>15</sup> All communities in Nunavut and certain communities in the Northwest Territories, Yukon, and British Columbia.

broadband Internet and other communications services. SSi submitted that Northwestel's planned increase in transport capacity is about one tenth the projected rate of growth of mobile data traffic, which will undoubtedly impact the quality and reliability of broadband service delivered to consumers.

29. With respect to satellite-served communities, Northwestel noted that it purchases its satellite transport service from Telesat Canada (Telesat) and that there is no alternative supplier to serve all of these communities.
30. TCC submitted that Telesat's absence from the proceeding makes it challenging to arrive at any determination about the provision of retail broadband Internet services in the Eastern Arctic.
31. Arctic Fibre submitted that the Commission should make the improvement of the transport network in Northwestel's operating territory a priority, indicating that the rollout of fibre backhaul to satellite-served communities would allow for a wider range of services at more affordable prices. It submitted that the benefits of fibre, such as reduced latency compared to satellite, the higher amount of bandwidth that can be provided, and the reduced cost per unit, are well known. Arctic Fibre also submitted that while fibre has a high up-front cost, it has a long asset life, is readily scalable, and the operating costs are reasonable.
32. Juch-Tech submitted that competitive satellite "middle-mile" providers will be a part of the solution to improved telecommunications services in the North, and noted that satellite plays an imperative role in delivering reliable and fast Internet services, as a backup to terrestrial systems, and as a primary means of providing service in more remote and underserved areas.

### **Broadband Internet service**

33. Northwestel submitted that the characteristics of its operating territory create two very distinct markets: communities that are served either by terrestrial or by satellite transport networks. Under its Plan, Northwestel proposed to deliver broadband Internet services to all terrestrially served communities at speeds that would meet or significantly exceed the Commission's target of 5 megabits per second (Mbps) download and 1 Mbps upload (the Commission's broadband target).<sup>16</sup>
34. Northwestel submitted that delivery of these target speeds to satellite-served communities, while technically feasible, would be prohibitively expensive due to the high cost of transport. Northwestel would only commit to providing Internet speeds of 1.5 Mbps download and 384 kilobits per second upload for satellite-served communities.

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<sup>16</sup> In Telecom Regulatory Policy 2011-291, the Commission established these target speeds for broadband Internet services. Further, the Commission stated that these speeds should be available to all Canadians, through a variety of technologies, by the end of 2015.

35. SSi submitted that the Commission's broadband target will never be affordable in the North if the availability and high cost of backbone capacity is not solved. The GN, the GNWT, the NBDC, and PIAC all expressed concerns that the Plan offers no improvements for satellite-served communities, with Northwestel opting to upgrade terrestrially served communities that already enjoy better services.

## **Redundancy**

36. The GN submitted that Northwestel does not seem to have any plan to provide redundancy through the use of services from two different satellites, which would provide for a more robust network architecture, particularly in Nunavut. Juch-Tech submitted that Northwestel and SSi should consider using satellite capacity from an alternate supplier for redundancy reasons.
37. Northwestel submitted that the challenge in northern Canada to provide redundancy is affected by the distances involved and infrastructure construction costs that are generally far higher than in southern Canada. Northwestel also submitted that creating redundancy for every single community would require millions of dollars for installation. Northwestel argued that its transport network is highly reliable and, as such, there is no demonstrated need for redundancy in backbone infrastructure, especially in a region where it does not own the entire transport network.
38. Northwestel submitted that the Plan will increase survivability (i.e. customers in small or remote communities will be able to call each other if their connection to the outside world goes down). The GN and YG disagreed that this provides a solution for those who depend on reliable access to telecommunications and information services for purposes such as commerce, education, health, and safety.
39. The three territorial governments expressed concerns with the lack of emphasis given to improving the reliability and continued performance of Northwestel's network, particularly with respect to backbone connectivity. YG further submitted that this concern is magnified by Northwestel's cancellation of planned fibre projects.

## **Fixed wireless switches**

40. Under the Plan, as part of its switch replacement initiative, Northwestel proposed to deploy fixed wireless switches in communities with a population of fewer than 700 residents. Northwestel submitted that these switches would provide benefits including ECFs, high-speed Internet, and 4G wireless services, as well as flexibility for future growth. However, these switches would also result in the loss of the following legacy services or features: facsimile service, dial-up Internet, equal access<sup>17</sup> for long distance, the hunt group feature<sup>18</sup> on multi-line private branch exchange (PBX) equipment, and analogue-based payphones.

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<sup>17</sup> Equal access allows competitive long distance service providers to interconnect their networks to local exchange carriers' (LECs) networks, and subscribers can access the long distance competitors' services

41. Northwestel submitted that implementation of the fixed wireless switches would start in 2014 and that the two networks would operate concurrently until the end of 2017. Northwestel further submitted that the transition of a community from a wireline platform to a fixed wireless voice platform would not begin until 2018.
42. Many parties expressed concerns with the functional limitations of the fixed wireless switches, and the GN submitted that the fixed wireless service should not be used to satisfy the BSO.
43. The GNWT submitted that Northwestel should be required to ensure that (i) the fixed wireless switches function fully with 9-1-1 service, (ii) the existing wireline network in any community will not be retired prior to 2018, (iii) PES provided by fixed wireless service will be offered at the same rates as wireline, and (iv) payphone service will continue in affected communities.
44. Northwestel submitted that, with regard to the loss of facsimile service, it is investigating a potential solution using a terminal adapter over a high-speed Internet connection, which would be provided at no cost to the customer upon request.
45. With respect to dial-up Internet service, Northwestel submitted that it only has 16 customers for this service who would be affected by the switch replacement. Northwestel further submitted that it would be introducing an Internet package that would be priced below \$30 per month and would offer a higher speed than dial-up Internet.
46. Northwestel submitted that, while a fixed wireless switch does not offer equal access, there are no records of any requests for equal access in any of the communities that will be served by such a switch. Further, voice over Internet Protocol (VoIP) and other services have made traditional long distance services irrelevant to many customers.
47. With respect to non-IP multi-line PBXs, Northwestel noted that the hunt group feature is not compatible with the fixed wireless switches but did not propose a solution. In the case of an IP PBX, the technology will be supported by the fixed wireless solution.
48. Northwestel noted that, for communities that presently have analogue payphones, those payphones will not function with the new fixed wireless switches. However, the company committed to deploying a payphone solution for those communities, whether it be IP-enabled payphones or another solution.

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as easily as they currently access long distance service provided by their LEC (i.e. by dialing either 0 or 1 plus a 10-digit telephone number).

<sup>18</sup> The hunt group feature allows incoming calls to a central phone number to be distributed among the members of that group.

49. Northwestel also submitted that the fixed wireless switches would meet the mandatory enhanced 9-1-1 (E9-1-1) requirements, and if E9-1-1 is rolled out to these communities, the company expects to develop a solution so that all the switches will provision E9-1-1 service in the same manner as it is provisioned over IP services in southern Canada.

### **Financing of the Plan**

50. Northwestel submitted that in determining the amount of capital investment for its Plan, it had used a capital intensity (CI) ratio that is much higher than those of Bell Canada and TCC. Northwestel also submitted that once BCE and Northwestel agree to the CI ratio, Northwestel's management decides how to best spend that capital investment to serve the customer base.
51. Northwestel argued that, as part of its investment strategy, the Plan relies on external funding. Since the costs of providing telecommunications services in the North are significant, Northwestel stated that its ability to complete the Plan is premised on achieving the revenue forecast, including the continued receipt of its existing contribution subsidy from the National Contribution Fund (NCF), as well as receiving third-party funding. Northwestel submitted that, if the Commission were to set priorities for the Plan, there would be an expectation that additional funding in some form would be needed.
52. YG and TCC generally submitted that the essential question is not how much is being spent, but what programs or priorities towards which capital is directed, and whether those programs or priorities satisfy the concerns identified by the Commission. The GN, YG, and Ice/Iristel generally submitted that the amount of annual spending in the Plan is essentially on the trend line of spending in prior years and, as such, it seems unlikely that the concerns identified in Telecom Regulatory Policy 2011-771 can be effectively addressed.
53. YG and PIAC noted that there were substantial dividends returned to Northwestel's parent company, BCE. Based on this, they submitted that these companies have the financial capacity to complete a modernization plan that will address the needs and concerns identified in Telecom Regulatory Policy 2011-771.
54. Some interveners were concerned that many aspects of the Plan depend on uncertain future revenue streams, third-party funding, or "contingency funding." They submitted that this makes parts of the Plan uncertain and subject to both Northwestel's evaluation of the business case and developments in the subsidy regime, including the NCF and other federal and territorial support programs.

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

### ***Scope of the Plan***

55. The Commission considers that Northwestel's proposed Plan will provide many benefits to Canadians in the North. With the rollout of new switching equipment providing ECFs in all communities, Northwestel will meet the BSO, as defined today, in all communities by 2017. As well, Northwestel's Plan provides for the rollout of 4G wireless and high-speed Internet services, and an increase in Internet speeds, to many communities. The Commission acknowledges that many of Northwestel's initiatives in the Plan will improve services in its operating territory.
56. However, despite the proposed improvements in the Plan, the Commission has the following concerns:
- transport infrastructure will not be sufficient to meet competitors' capacity requirements or to meet service expectations for all customers;
  - satellite-served communities will continue to lag behind terrestrially served communities in terms of service availability and quality, in particular for broadband Internet and future telecommunications services;
  - the lack of network redundancy and diversity in certain portions of the network may impact service reliability; and
  - the implementation of fixed wireless switches will result in the loss of certain services and functionalities.

### ***Transport infrastructure***

57. The Commission notes Northwestel's commitment to restore all fibre investments in the Plan if there is a favourable outcome to its review and vary application regarding the rates established for Wholesale Connect service in Telecom Order 2013-93. The Commission considers that the revised rates for Wholesale Connect service approved in this decision should alleviate Northwestel's concerns regarding the company's incentive to invest in fibre. As a result, the Commission expects Northwestel to fully reinstate the planned fibre infrastructure expenditures that were included in its Plan prior to the filing of its review and vary application.
58. With respect to Northwestel's terrestrial transport network, the Commission considers that, even after implementation of the Plan, there will likely not be sufficient capacity to meet current and increasing future needs.
59. As a result, the Commission considers that investments in transport infrastructure, in addition to the investments in fibre discussed above, are needed to further improve network capacity. The Commission notes that there are significant investments

assigned to the Core category<sup>19</sup> of the Plan. The Commission considers that a re-evaluation of the Core category expenditures may allow Northwestel to make additional investments in transport infrastructure, which would provide better service to unserved or underserved areas, as well as contribute to the objective of achieving a level of service that is comparable to that in southern Canada.

60. With respect to satellite-served communities, the Commission notes that Northwestel and SSi rely on Telesat for the provision of satellite transponder capacity to provide various services, including broadband Internet and long distance services, to these communities. The cost of satellite transponder capacity has been identified as a limiting factor in the provision of reasonably priced services in these communities. While the access infrastructure in the communities is currently able to support Internet services at the Commission's broadband target, or would be able to do so with infrastructure upgrades, the Commission considers that the high satellite transport costs to provision these services at this target would render the service unaffordable to end-customers.

### ***Broadband (High-speed Internet)***

61. The Commission notes that Northwestel will be upgrading Internet service in terrestrially served communities, and that all are projected to have Internet services available at the Commission's broadband target at a minimum. However, the Commission notes that satellite-served communities will not receive upgrades sufficient to reach the Commission's broadband target.
62. As noted above, the high cost of satellite transponders required to provide service to satellite-served communities will continue to limit the availability of affordable broadband services to these communities at the Commission's target speeds. The Commission also considers that, while there are some improvements in technology or infrastructure projects that may reduce these costs, such as high-throughput satellites and new fibre infrastructure proposed by Arctic Fibre, the possible benefits of these improvements may take years to materialize.

### ***Redundancy***

63. The Commission considers that terrestrial transport redundancy is important, as evidenced by service outages in the past. Since the creation of a fibre ring by Northwestel in 2011,<sup>20</sup> major service outages have been avoided. Fibre projects either underway or planned by third parties, in addition to fibre projects proposed by Northwestel in the Plan, will continue to improve overall terrestrial transport redundancy.

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<sup>19</sup> Core category capital expenditures are those that are part of an ongoing capital program and are generally for normal maintenance and demand for existing services.

<sup>20</sup> Northwestel invested \$10 million in fibre from Fort Nelson, British Columbia to Hay River, Northwest Territories and created a fibre ring in the southeastern part of its operating territory.

64. With respect to transport service in satellite-served communities, the Commission considers that there is currently an absence of redundancy with respect to satellite transport. The Commission notes that failure of Telesat's Anik F2 satellite facilities in the past has caused, among other things, the loss of telecommunications services in satellite-served communities.<sup>21</sup>
65. The Commission is of the view that while improving transport redundancy is an important goal related to telecommunications infrastructure in Northwestel's operating territory, it would not be reasonable, due to limited resources, to expect these improvements to be made at the same time as Northwestel modernizes its network. The Commission notes that its determinations and expectations in this decision are made with the objective of ensuring that northern Canadians have access to telecommunications services that are as comparable as possible to those provided to southern Canadians. Therefore, on balance, the Commission considers that additional investment in redundancy, while important, is a lower priority at this time.

### ***Fixed wireless switches***

66. With respect to the issue of whether fixed wireless services meet the BSO, the Commission notes that in the past, it has permitted radio-based and fixed wireless solutions to be used in certain situations to provision PES and meet the BSO. Given this, and in light of the added benefits of being able to support 4G wireless and high-speed Internet services, the Commission considers Northwestel's proposal to deploy fixed wireless switches in its operating territory to be appropriate.
67. With respect to the limitations of fixed wireless switches, the Commission notes that Northwestel has proposed or is working on solutions for the issues pertaining to the availability of facsimile service, dial-up Internet, E9-1-1, and analogue-based payphone service, but did not propose a solution with respect to the hunt group feature on non-IP multi-line PBXs. The Commission considers it appropriate for Northwestel to provide updates on the implementation of these solutions as well as any reported issues pertaining to the hunt group feature on non-IP multi-line PBXs. The timing of these updates is addressed later in this decision in the Monitoring of the Modernization Plan section.
68. The Commission notes that Northwestel has not had a request for equal access from other service providers since 2000, and that VoIP and other services that do not require equal access are viable alternatives to traditional long distance services. Accordingly, the Commission considers that the lack of equal access with the fixed wireless switches will likely not be an issue.
69. Finally, given the concerns about the limitations of fixed wireless switches, the Commission directs Northwestel to operate both the wireline and wireless systems

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<sup>21</sup> For example, on 6 October 2011, Telesat's Anik F2 satellite malfunctioned for approximately 16 hours, which resulted in the unavailability of Internet, cellular, and long distance telephone services.

until the company confirms that issues pertaining to the wireless platform have been resolved. Further, the Commission considers that, similar to the situation where an incumbent local exchange carrier (ILEC) wishes to destandardize a service, Northwestel should be required to file an application to remove the wireline system.

70. Accordingly, the Commission directs Northwestel to file an application seeking approval to remove its wireline facilities once concerns have been resolved and all customers have been successfully transitioned to the new system.

### ***Financing of the Plan***

71. With respect to the level of funding required to implement the Plan, the Commission does not consider it appropriate to prescribe specific CI ratios. The Commission considers that the primary focus for Northwestel should be to meet the infrastructure upgrade targets set out in the Plan and the Commission's expectations for modernization set out in this decision. Accordingly, the Commission expects Northwestel to make investments necessary to fulfill the determinations and expectations set out in this decision.

### **Conclusions**

72. In light of the above, the Commission finds that the Plan will not be successful in delivering services to Canadians across all of Northwestel's operating territory that are comparable to services available to consumers in southern Canada.
73. The Commission considers that investing in transport upgrades is an important priority for telecommunications development in the North, and that such investment is required for economic development and to meet the growing demands of northern customers for access to services such as health care, education, government programs, and banking. Therefore, the Commission considers that Northwestel's Plan should focus on implementing solutions to improve the capacity of the company's transport infrastructure, including the reinstatement of fibre investments as well as a re-evaluation of Core category expenditures.
74. The Commission considers that it would be appropriate for Northwestel to resubmit its Plan, modified to take into account the Commission's determinations and expectations resulting from this proceeding. The Commission also considers that the starting point for a revised modernization plan would be the Plan filed by Northwestel on 15 February 2013 (i.e. \$233 million of capital investment over five years).
75. Northwestel indicated that it expected to be accountable for the timelines and communities that were identified in Attachments 1 to 7 in the Plan filed on 15 February 2013. The Commission expects that, at a minimum, Northwestel's revised Plan will include these commitments.
76. The Commission therefore directs Northwestel to submit a revised modernization plan by 31 March 2014 that takes into account the determinations and expectations

set out in this decision, including the reinstatement of fibre investment and a greater focus on investment in transport infrastructure.

77. The Commission notes that Northwestel has proposed to file annual reports to provide updates on the rollout of the Plan. The Commission has set out the requirements with respect to these annual reports later in this decision.
78. Furthermore, the Commission is of the view that it would not be financially possible for Northwestel alone to address the issue of transport services in satellite-served communities. As outlined below in the section addressing subsidy issues, the Commission will launch in 2014 1) an inquiry on satellite transport services offered in Canada, and 2) a proceeding in which, among other things, it intends to establish a mechanism to fund infrastructure investment in transport facilities in Northwestel's operating territory.

## **II. Subsidy**

### **Current subsidy regime**

79. The Commission's current local service subsidy regime<sup>22</sup> provides compensation to ILECs only for the provision of their residential PES in regulated high-cost serving areas (HCSAs)<sup>23</sup> since they are the only carriers with an obligation to serve.<sup>24</sup>
80. Currently, Northwestel receives a total annual subsidy from the NCF associated with (i) providing residential PES in HCSAs, and (ii) funding the ongoing requirements of the non-access portion of Northwestel's service improvement plan (SIP).<sup>25</sup>
81. In Telecom Decision 2013-630, the Commission approved \$21.1 million in subsidy for Northwestel for 2013, which was made up of \$11.0 million in subsidy for providing residential PES in HCSAs and \$10.1 million in subsidy related to the ongoing requirements associated with its SIP.
82. Currently, a two-band structure is used to determine the amount of residential PES subsidy that Northwestel receives. Northwestel's wire centres<sup>26</sup> in Whitehorse and

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<sup>22</sup> The local service subsidy regime, along with the associated contribution regime and the NCF, was established in Decision 2000-745 with a view to subsidizing the provision of basic residential local telephone service in rural and remote areas of Canada.

<sup>23</sup> The only exception is certain forborne small ILEC exchanges where forbearance from the regulation of local exchange services has been granted using a competitor presence threshold of 50 percent. See Telecom Regulatory Policy 2011-291 for more details.

<sup>24</sup> The obligation to serve requires ILECs to provide telephone service to existing customers, to new customers requesting service where the ILEC has facilities, and, subject to certain terms and conditions, to new customers requesting service beyond the limits of the ILEC's facilities.

<sup>25</sup> In Decision 2000-746, the Commission approved a SIP for Northwestel, which was an initiative undertaken by the company to extend services to unserved areas and to upgrade services to underserved areas. In Telecom Decision 2007-5, the Commission approved subsidy funding from the NCF for Northwestel related to the ongoing requirements associated with the non-access portion of the SIP (dial-up Internet, transport, switching, and long distance).

<sup>26</sup> A wire centre is a building that houses switching equipment to serve a designated geographical area.

Yellowknife are grouped into one band consisting of wire centres with total network access services (NAS) greater than 8,000 and designated as Band D, a non-HCSA band. All of its other wire centres are grouped together into one band and designated as Band H1, an HCSA band eligible for subsidy from the NCF.<sup>27</sup>

83. Northwestel's subsidy is calculated on a subsidy-per-residential-NAS basis. The basic components of Northwestel's calculation are (i) the cost of providing service in Band H1, adjusted annually for inflation<sup>28</sup> starting in 2012,<sup>29</sup> plus a 15 percent markup to cover fixed and common costs, and (ii) the Band H1 residential local rate component plus a fixed implicit contribution target amount of \$4 per NAS per month from other local services.<sup>30</sup> Further, the NAS figure used to determine the annual subsidy amount is based on Northwestel's year-end residential NAS in Band H1 from the previous year.<sup>31</sup>

#### **Update to the residential PES subsidy costs**

84. The Band H1 residential PES subsidy costs were last reviewed and approved in Telecom Regulatory Policy 2011-771. Since 2012, these costs have been adjusted annually for inflation.
85. Northwestel proposed that the current method to calculate residential PES subsidy costs should continue until the end of the next price cap period (proposed to be four years) and submitted that it would be appropriate to review the costs for residential PES in HCSAs in the next regulatory framework review proceeding.

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

86. The Commission notes that Northwestel will be making changes to its network over the next four years, which will impact the underlying costs to provide residential PES. However, these changes will not be completed until late 2017 at the earliest. As a result, the Commission considers that it would be premature to review the Band H1 residential PES costs at this time. The Commission expects to review these costs as part of Northwestel's next regulatory framework review proceeding.

#### **Impute annual increases to the rate component**

87. In Telecom Regulatory Policy 2011-291, the Commission determined that the residential local rate components of the subsidy calculations for all the other ILECs

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<sup>27</sup> Approved in Telecom Decision 2007-5.

<sup>28</sup> The inflation index is the annual chain-weighted gross domestic product – price index (GDP-PI), which is a measure of the national output price change published by Statistics Canada.

<sup>29</sup> See Telecom Regulatory Policy 2011-771.

<sup>30</sup> In Decision 2000-745, the Commission considered that ILECs receive intangible benefits as universal service providers, and directed the use of a fixed implicit contribution target amount for subsidy calculation purposes. All other ILECs use an implicit contribution amount of \$5 per NAS per month.

<sup>31</sup> The other ILECs receive subsidy based on the filing of monthly HCSA residential NAS information with the Central Fund Administrator.

would be increased annually by the rate of inflation starting 1 June 2014, with the subsidy being reduced regardless of whether the ILECs actually raised their rates. The ILECs would have the opportunity under the price cap framework to increase their actual residential local rates by the rate of inflation.

88. Northwestel proposed to freeze its residential local rates at their current levels and stated that the imputed residential local rate increases in Telecom Regulatory Policy 2011-291 did not apply to it. Northwestel submitted that, if the Commission were to introduce this approach, changes would be required to its price cap baskets and constraints.

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

89. The Commission considers that requiring Northwestel to impute annual inflation increases to its residential local rate component starting on 1 June 2014 would ensure that the company is treated in the same manner as all other ILECs. Consistent with this approach, Northwestel will have the flexibility to increase residential local rates in Band H1 by inflation annually, as discussed later in this decision. Accordingly, the Commission directs Northwestel to impute annual inflation increases to the residential local rate component of its subsidy calculation starting on 1 June 2014.

#### **Change to the implicit contribution amount**

90. Northwestel's annual subsidy amount is calculated based on an implicit contribution amount of \$4 per residential NAS per month because access to all optional local services is not currently available in all its remote communities.
91. Northwestel identified that, by the end of the Plan, it would provide ECFs to all communities where these services are currently unavailable. Northwestel also identified that it was forecasting lower optional service revenue due to increased competitive alternatives. Therefore, Northwestel submitted that the current \$4 target implicit contribution amount is already difficult to achieve and that it would not be appropriate to increase this amount to \$5.

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

92. The Commission notes that all other ILECs use an implicit contribution amount of \$5 per residential NAS per month to recognize that ILECs receive intangible benefits as universal service providers. This implicit amount is also considered to be an incentive to generate margins from the various residential local optional services.
93. The Commission considers that it would be appropriate to increase the monthly implicit contribution amount gradually over time to reflect the fact that by the end of the Plan, all of Northwestel's customers will have access to ECFs.
94. Accordingly, the Commission directs Northwestel to increase the monthly implicit contribution amount by \$0.25 per residential NAS in each of the next four years (i.e. use \$4.25 in 2014, \$4.50 in 2015, \$4.75 in 2016, and \$5.00 in 2017).

### **Availability of the existing residential PES subsidy to competitors**

95. In Telecom Regulatory Policy 2011-291, the Commission determined that subsidies for residential PES would no longer be available to competitors, indicating that they should only be available to ILECs that have an obligation to serve all customers in a given HCSA.
96. In Telecom Regulatory Policy 2011-771, the Commission determined that, consistent with the determinations in Telecom Regulatory Policy 2011-291, it would not be appropriate for the subsidy for residential PES in Northwestel's operating territory to be available to competitors, since the obligation to serve remains with Northwestel.
97. Northwestel submitted that nothing has changed since Telecom Regulatory Policies 2011-291 and 2011-771 were issued to alter the Commission's finding that subsidy for residential PES should not be made available to competitors. The GNWT and YG submitted that the subsidy mechanism should be available to local service competitors in order to allow them to enter the market on a competitively balanced and neutral basis. Ice/Iristel submitted that only providing PES subsidy to Northwestel would limit the potential scope of competition. Juch-Tech and SSi also supported making subsidy for residential PES available to competitors.

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

98. The Commission acknowledges that making the residential PES subsidy available to competitors could encourage the rollout of competition. However, consistent with its determination in Telecom Regulatory Policy 2011-291, the Commission remains of the view that the existing residential PES subsidy should only be made available to Northwestel, since it has the obligation to serve all customers in a given HCSA. Therefore, the Commission determines that subsidy for residential PES will not be available to competitors in Northwestel's operating territory.

### **Calculation of subsidy**

99. Northwestel's residential PES subsidy is approved as fixed annual subsidy amounts, with the Central Fund Administrator (CFA)<sup>32</sup> paying subsidy to Northwestel based on one twelfth of the fixed annual subsidy amount each month.
100. Northwestel submitted that its annual residential subsidy should continue to be calculated based on the year-end NAS for the previous year for simplicity and to ensure funding stability, which would be helpful in the company's implementation of its Plan.

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<sup>32</sup> The CFA is an independent third party, designated by the Commission pursuant to the Act, to administer the NCF.

101. TCC submitted that Northwestel's residential PES subsidy should be based on the number of NAS that Northwestel actually serves, and that this figure must be calculated on a monthly basis.

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

102. The Commission notes that all other ILECs receive their monthly subsidy based on their actual monthly number of HCSA residential NAS.

103. The Commission considers that requiring Northwestel to file monthly HCSA residential NAS information with the CFA would ensure consistency among all ILECs. Further, monthly filings would more accurately reflect the number of NAS being served and would ensure that Northwestel receives subsidy only for customers to whom the company provides service.

104. In light of the above, the Commission

- directs Northwestel to report its monthly Band H1 residential NAS to the CFA, effective the December 2013 data-month, so its monthly subsidy entitlement can be calculated, starting in 2014, based upon the actual number of residential NAS served;
- approves on an interim basis, effective 1 January 2014, a Band H1 subsidy amount of \$45.05 per month per residential NAS (which is based on the 2013 subsidy amount approved in Telecom Decision 2013-630); and
- directs the CFA to calculate and pay Northwestel's monthly subsidy entitlement based on the monthly Band H1 NAS reported, starting with the January 2014 data-month.

105. As noted above, Northwestel receives \$10.1 million from the NCF for the ongoing requirements associated with the non-access portion of the SIP. The Commission directs the CFA to also distribute, on a monthly basis, one twelfth of the ongoing SIP funding amount to Northwestel, effective 1 January 2014.

**Proposed changes to the subsidy regime**

106. In Telecom Notice of Consultation 2012-669, the Commission stated that it would review the subsidy regime in Northwestel's operating territory, taking into consideration subsection 46.5(1) of the Act<sup>33</sup> as well as the unique challenges in providing telecommunications services in the North. The Commission stated that it would consider whether it is appropriate to modify the subsidy regime for funding telecommunications services in the North. The Commission indicated that any such

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<sup>33</sup> Subsection 46.5(1) of the Act states that the Commission may require any telecommunications service provider to contribute, subject to any conditions that the Commission may set, to a fund to support continuing access by Canadians to basic telecommunications services.

modifications could include, but need not to be limited to, elements of the proposal submitted by Ice/Iristel in their 8 August 2012 application.

107. During the proceeding, many parties submitted that broadband services are essential in the North and should be subsidized. They advocated for broadband infrastructure funding in order to increase access to broadband Internet service at higher speeds as well as encourage competition in the North for telecommunications services.
108. On the other hand, many parties were opposed to subsidizing broadband services. They argued that these issues would be better considered in the proceeding to determine what services are required by all Canadians to fully participate in the digital economy, which will be held in 2014.<sup>34</sup>
109. UCG indicated that the Commission's policies should take into account the realities of today's rapidly changing technological world. The GN and YG were of the view that the Commission can and should address the broadband issue in this proceeding because the problem is known today. The NBDC and PIAC urged the Commission to focus on ensuring that Canadians in the North have access to the modern communications services they need.
110. In their 8 August 2012 application, Ice/Iristel proposed a new approach to funding telecommunications services in the North, which consisted of two financial components. The first funding component would provide financial support for long-haul telecommunications transport to southern Canada for both terrestrial and satellite capacity to serve remote communities. Ice/Iristel proposed that all service providers would have access to these transport facilities at the same subsidized cost. They proposed a second funding component that would provide financial support for serving very small remote communities and that would also be available to all service providers.
111. During the proceeding, Ice/Iristel proposed that the Commission could divert NCF funds currently going only to Northwestel and require some incremental funding from the NCF for a northern transport subsidy. In their view, while this would not solve the entire challenge, it would also not excessively burden telecommunications companies in southern Canada.
112. SSi stated that broadband must be recognized as an essential service in the North and proposed an assistance program to fund transport infrastructure that would allow all service providers in the North to gain open and affordable access to transport.
113. The GN, the GNWT, YG, Eeyou, First Mile, and the NBDC were generally of the view that the NCF should be used to fund broadband Internet service and that the subsidy should be portable or that competitors should have open access to the facilities. First Mile submitted that a regulatory framework that encourages open access to publicly subsidized transport facilities is in the best interest of local

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<sup>34</sup> See CRTC Three-Year Plan 2013-2016 at <http://www.crtc.gc.ca/eng/backgrnd/plan2013.htm>.

communities that can leverage this infrastructure in various ways. The GNWT suggested the creation of a working group to identify specific transport projects that are needed. A competitive bidding process would then be established to select the service provider willing to undertake each project with the lowest subsidy payment.

114. Northwestel, Allstream, PIAC, and TCC were of the view that changes to the subsidy regime should be reviewed in the national policy proceeding mentioned above that will be initiated in 2014.
115. Allstream stated that unless and until the Commission determines that a subsidy for broadband Internet service is made available to all ILECs to deploy these facilities to fulfill their obligation to serve, Northwestel should not receive subsidies from the NCF. However, Allstream also submitted that, if the Commission determines that subsidies are to be made available to fund Northwestel's deployment of broadband facilities, competitors should be granted access to those facilities at rates that reflect the net cost of deployment.
116. Northwestel indicated that subsidies are not needed for terrestrial transport infrastructure. However, the cost of satellite transport is the single biggest impediment to affordable Internet services in satellite-served communities in the North. Northwestel and SSI stated that it is technically feasible to offer the Commission's target speeds in satellite communities, but that the service would be prohibitively expensive for consumers.
117. TCC agreed with Northwestel that there is no need to establish subsidies for transport in terrestrially served communities, but stated that it would be premature to consider a subsidy for satellite transport without first taking a close look at the costs and rates for Telesat's satellite services.
118. The GNWT stated that it would not oppose subsidizing satellite transport rates, but was concerned that this could discourage the adoption of satellite alternatives. Arctic Fibre indicated that until now, various subsidies have been offered to operators in satellite-served communities to reduce the rates they pay to Telesat for satellite transport. According to Arctic Fibre, this approach does not solve the issue on a long-term basis, and the rollout of fibre transport should be encouraged wherever possible.
119. The NWTCC argued that if the Commission wishes to achieve its target for broadband, it and/or government should subsidize investments beyond the limit of prudent business practices. Northwestel, the NWTCC, and TCC all agreed that targeted government funding for broadband is preferable to an industry-funded mechanism.

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

120. The Commission recognizes that broadband Internet access is, more than ever, an important means of communication for northern Canadians, and that it is needed to

achieve a number of social, economic, and cultural objectives, as evidenced by the parties' submissions in this proceeding.

121. The Commission notes that Northwestel will not achieve the Commission's broadband target by 2015 in all of its operating territory. As noted earlier in the decision, the implementation of Northwestel's Plan will result in all terrestrially served communities having access to Internet services at speeds at or above the Commission's broadband target only by 2017. In addition, according to the Plan, most satellite-served communities will see no improvements to Internet services.
122. The Commission notes that both Northwestel and SSi stated that it is technically feasible to offer broadband Internet service at the Commission's target speeds in satellite-served communities, but that the cost of satellite transport is the biggest impediment to affordable broadband Internet services. The evidence in this proceeding demonstrates that rates in satellite-served communities for residential broadband Internet access are generally much higher than rates in terrestrially served communities. Further, most parties in this proceeding identified transport infrastructure as an important issue in the North to ensure access to affordable broadband Internet service at the Commission's target speeds and to other telecommunications services.
123. The Commission considers that transport infrastructure in the North, particularly in satellite-served communities, needs to be addressed. The Commission also considers that, without its intervention, the digital divide within Northwestel's territory (i.e. terrestrially versus satellite-served communities) will likely not be resolved. The Commission outlines below its approach to addressing the challenges of delivering modern telecommunications services to meet the needs of consumers in Northwestel's operating territory.
124. As noted in its Three-Year Plan 2013-2016, the Commission intends to initiate in 2014 a comprehensive review of the services required by all Canadians to fully participate in the digital economy. The Commission will also consider whether there should be changes to the subsidy regime and national contribution mechanism. Consistent with the Act, one of the main objectives of this review will be to ensure that all Canadians have access to reliable and affordable telecommunications services of high quality.
125. As part of this review, the Commission intends to establish a mechanism, as required, to support the provision of modern telecommunications services in Northwestel's operating territory that are responsive to the economic and social needs of Canadians in the North. Such a mechanism would fund capital infrastructure investment in transport facilities (e.g. fibre, microwave, and satellite), as well as the cost of maintaining and enhancing these facilities to ensure that they support evolving telecommunications services, such as broadband Internet. The Commission considers that this mechanism should complement, and not replace, other investments from the private sector and governments, including public-private partnerships.

126. In addition, with respect to the issue of satellite transport services in Northwestel's operating territory, the Commission considers that there is insufficient information on the record of this proceeding for the Commission to make an informed determination on this issue at this time.
127. The Commission notes that Telesat is the main provider of satellite transport services to companies that offer a range of telecommunications services in northern Canada, including regions outside Northwestel's operating territory. Telesat's regulatory framework was last examined by the Commission in 1999. In Telecom Decision 99-6, the Commission forbore from regulating, among other things, Telesat's rates for radio frequency channel services provided over fixed satellite service facilities, and established a price ceiling on these rates that Telesat could charge in certain circumstances. The Commission retained its powers under sections 24 and 27 of the Act in that decision.
128. The Commission considers it appropriate to gain a better understanding of the satellite transport services provided by Telesat, including the rates charged, the costs of providing these services, and satellite capacity. Further, the Commission notes that there are other satellite operators that could offer alternative transport services to telecommunications service providers in many communities in Northwestel's operating territory. Therefore, the Commission finds it appropriate to examine satellite transport services available in Canada that can be used to provide telecommunications services.
129. The Commission notes that, pursuant to subsection 70(1) of the Act, it can appoint any person to inquire into and report to the Commission on any matter pending before the Commission or within its jurisdiction under the Act. In early 2014, the Commission will launch an inquiry on satellite transport services offered in Canada.
130. Finally, many parties in this proceeding noted that other communities in Canada, not just satellite-served communities, are facing challenges in achieving the Commission's broadband target. The information collected by the Commission for its annual Communications Monitoring Report confirms that Canadians in many other rural and remote parts of the country do not enjoy the same level of telecommunications services as other Canadians.
131. The Commission considers that this broader issue should be reviewed in the proceeding to determine what services are required by all Canadians to fully participate in the digital economy and whether there should be changes to the subsidy regime and national contribution mechanism to ensure access to reliable and affordable telecommunications services of high quality for all Canadians.

### **III. Services used by competitors**

#### **Wholesale Connect service**

##### ***Review and vary of Wholesale Connect service***

132. Northwestel's Wholesale Connect service allows competitors to transport telecommunications traffic across the portion of Northwestel's network served by fibre or high-capacity microwave radio transport links. Competitors can use the service to connect their points of presence in various communities and provide telecommunications services to their customers in those communities.
133. As noted earlier in this decision, the Commission received an application from Northwestel in April 2013, requesting that it review and vary certain determinations made in Telecom Order 2013-93. Specifically, Northwestel requested that the rates for Wholesale Connect service be revised to reflect the following:
- a fibre cost factor (FCF)<sup>35</sup> of 6.0, compared to the approved FCF of 0.7;<sup>36</sup> and
  - a markup<sup>37</sup> on Phase II costs of 60 percent, compared to the approved markup of 30 percent.
134. PIAC submitted that if Northwestel's request is granted, it could potentially impact wholesale rates, and ultimately retail rates, as well as the availability of competitive alternatives in Northwestel's operating territory.
135. Ice/Iristel submitted that the rates approved for Wholesale Connect service provide the basis for competitive service providers to survive. Further, Ice/Iristel and other competitors submitted that the ability to move traffic to southern Canada and back at reasonable prices is required to create the kinds of services needed by northerners.
136. The GNWT submitted that rates should be established at a level that allows recovery of the services' long-run incremental costs. The GNWT further submitted that rates set below that level could provide a disincentive to fibre-optic transport investment, while rates set above that level could damage the emergence of competition. YG supported the GNWT's position.

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<sup>35</sup> The FCF approach is used by large ILECs to estimate transport fibre costs associated with a service. This approach relies on the ratio of fibre cable investments to the related fibre electronic investments. For example, an FCF of 0.25 means that for every \$100 invested in fibre electronic equipment, \$25 will be spent on fibre cable investment.

<sup>36</sup> In Telecom Order 2013-93, the FCF of 0.7 that was approved was based on the average of other ILECs' FCFs times a factor of two.

<sup>37</sup> In this instance, markup is defined as the difference between the approved costs and the rate charged for the service, and serves as a contribution towards the company's fixed and common costs and a profit margin.

137. In Telecom Information Bulletin 2011-214, the Commission outlined the criteria it would use to assess review and vary applications that are filed pursuant to section 62 of the Act. Specifically, the Commission stated that applicants must demonstrate that there is substantial doubt as to the correctness of the original decision, due to, for example, one or more of the following: (i) an error in law or in fact, (ii) a fundamental change in circumstances or facts since the decision, (iii) a failure to consider a basic principle which had been raised in the original proceeding, or (iv) a new principle which has arisen as a result of the decision.

*Fibre cost factor*

138. Northwestel argued that the Commission committed an error in fact by approving an FCF of 0.7 to calculate the company's transport fibre costs, as it did not consider past rulings and decisions for estimating the FCF.

139. Northwestel submitted that applying the Commission's practice, as used for other ILECs, would result in an FCF of 6.0 based on five years of historical data from 2008 to 2012. Northwestel also argued that the Commission's practice for calculating an FCF is to use company-specific values based on multiple years of data. Northwestel further argued that any other determination would be inconsistent with past practice and Commission decisions, and/or would not reflect the company's actual experience, and would therefore be inappropriate.

140. Allstream submitted that since service cost studies reflect long-run costs, it follows that the correct FCF should be lower than Northwestel's proposed FCF. Allstream further submitted that the Commission provided reasonable justification for the FCF of 0.7 in Telecom Order 2013-93.

*Commission's analysis and determinations*

141. The Commission notes that in a number of prior decisions, it used cost studies based on multiple years of company-specific data to calculate approved FCFs. The Commission notes that Northwestel is at an earlier stage of deploying fibre in its transport network as compared to other ILECs, and considers that the use of a long-run FCF of 0.7 would impact the progress of fibre deployment. Accordingly, the Commission considers that it was not appropriate to use an FCF based on the data of other ILECs in establishing Northwestel's Wholesale Connect service rates.

142. As such, the Commission finds that there is substantial doubt as to the correctness of its decision to use an FCF of 0.7 in the cost study used to establish the rates for Northwestel's Wholesale Connect service.

143. Notwithstanding the Commission's finding in Telecom Order 2013-93 regarding the use of historical data to calculate an FCF for Wholesale Connect service, the Commission considers that, at the current time, an FCF based on historical rather than forecast data would be a better approach. In that regard, the Commission notes that Northwestel's planned investment in transport fibre fluctuates significantly and there is uncertainty associated with the company's forecast investment.

144. In this proceeding, Northwestel provided, in response to a Commission request for information, revised annual actual and forecast data for the investment in transport fibre and fibre electronics. In this data, an FCF of 5.5 was calculated using updated company-specific historical data for the years 2008 to 2012. The Commission has assessed this data and considers that an FCF of 5.5 is appropriate in these circumstances.
145. In light of the above, the Commission determines that an FCF of 5.5, based on company-specific historical data, is to be used in establishing the rates for Northwestel's Wholesale Connect service.

### *Markup*

146. Northwestel submitted that the 30 percent markup approved for the Wholesale Connect service in Telecom Order 2013-93 is clearly anomalous and not based on sound rate-setting principles, thereby constituting an error in law. Northwestel argued that the 30 percent markup is unreasonably low and undermines the business case for investment in fibre facilities, submitting that a markup of 60 percent is required.
147. As part of its argument in favour of an increased markup, Northwestel referred to Telecom Regulatory Policy 2011-703, where the Commission recognized that fibre-based services would attract an additional 10 percent markup, and that it was reasonable to recognize the significant upfront investment needed for these services. Northwestel argued that, in Telecom Order 2013-93, the Commission found that Wholesale Connect service was similar to wholesale high-speed access services provided by large ILECs. Therefore, Northwestel submitted that Wholesale Connect service should include at least a 40 percent markup.
148. Northwestel also argued that where a wholesale high-speed access service is used to deliver both residential and business retail services, the 40 percent markup should be increased to 50 percent to reflect the higher markups that are generally applied to the business market. Further, an additional 10 percent premium for fixed and common costs unique to the Far North should be included in the markup. Based on its arguments, Northwestel concluded that a combined markup of 60 percent is required for its Wholesale Connect service.
149. Ice/Iristel submitted that Northwestel's benchmark to the fibre-to-the-node high-speed access services of ILECs in southern Canada is inappropriate because those services are primarily access services in urban areas where there is well-established competition and competitors can build alternative facilities if required.
150. PIAC argued that there are sufficient differences between Northwestel's Wholesale Connect service and the ILECs' wholesale high-speed access service, as well as market conditions, to warrant different markups. PIAC submitted that the additional markup for Wholesale Connect service was not justified.

151. Allstream submitted that the Commission did not err in selecting a markup of 30 percent as it provides reasonable compensation.

*Commission's analysis and determinations*

152. In setting the Wholesale Connect service rates in Telecom Order 2013-93, the Commission sought to balance the need to ensure that service providers are reasonably compensated for their costs and continue to invest in their networks with the need to ensure that markups are not so high as to prevent competitors from providing competitive alternatives in the marketplace. Based on the evidence in this proceeding, the Commission considers that a markup of 30 percent does not achieve this balance.
153. With respect to Northwestel's request to adjust the markup to recognize its fibre investment, the Commission considers that an increase to the markup would recognize the additional risk associated with the upfront investment in fibre facilities in Northwestel's terrestrially served areas. The Commission also considers that this risk is greater than, and distinguishable from, the risk associated with other Northwestel facilities because of the challenges of provisioning fibre facilities to small remote terrestrially served communities scattered over the company's operating territory.
154. With respect to Northwestel's request for additional markup to reflect the higher markup associated with retail business services, the Commission considers that the cost to provide Wholesale Connect service is the same whether it is used to provide business or residential retail services. As such, the Commission considers that it would not be appropriate to reflect any retail markup differential in determining a wholesale rate. With respect to the additional markup for higher fixed and common costs associated with Northwestel's operating territory, the Commission considers that these costs were already reflected in the markup approved in Telecom Order 2013-93.
155. Based on the above, the Commission finds that there is substantial doubt as to the correctness of its determination in Telecom Order 2013-93 to use a 30 percent markup in developing the rates for Wholesale Connect service. In that regard, the Commission considers that an additional 10 percent markup would be appropriate to account for the additional risk associated with the construction of fibre facilities in Northwestel's operating territory.
156. Accordingly, the Commission determines that a markup of 40 percent is to be used in establishing the rates for Northwestel's Wholesale Connect service.

### *Final rates for Wholesale Connect service*

157. Revised rates using an FCF of 5.5 and a markup of 40 percent for Wholesale Connect service are provided in Appendix 2 of this decision. Northwestel is to issue revised tariff pages<sup>38</sup> reflecting these rates by **15 January 2014**.
158. The Commission recognizes that these determinations will result in rate increases for competitors using Northwestel's Wholesale Connect service. However, the Commission considers that the Wholesale Connect service rates approved in this decision are just and reasonable and more appropriately balance the need to ensure that Northwestel is reasonably compensated for its costs and continues to invest in its fibre networks with the need to ensure that markups are not so high as to prevent competitors from providing competitive alternatives in the marketplace.

### **Modifications to Wholesale Connect service**

159. Various parties to the proceeding indicated that, while Wholesale Connect service is an important service for the rollout of competition, certain modifications are required in order to ensure the service meets their needs.

### **SSi's request**

160. SSi requested the following changes to Wholesale Connect service: (i) offer Wholesale Connect service over a 1 gigabit-per-second (Gbps) speed tier, (ii) provide an additional breakout point at Fort Nelson, British Columbia, (iii) provide better technical parameters as part of Northwestel's service level agreements (SLAs),<sup>39</sup> and (iv) ensure there are no limits on virtual local area networks (VLANs).<sup>40</sup>
161. Northwestel indicated that it is willing to have discussions with SSi and other carriers to see if there is sufficient interest in the 1 Gbps speed tier and, if so, it would target implementation in 2014.
162. Northwestel indicated that it is willing to offer a breakout point in Fort St. John, British Columbia subject to either it or the wholesale customer making an arrangement with the third party to provide a breakout point. Northwestel also stated that it would amend the breakout rate to reflect any additional charge that may be levied by the third party since Fort St. John is outside its operating territory.
163. The Commission notes that the SLAs for Wholesale Connect service are the same as those for similar services offered by Northwestel on a retail basis. Further, SSi did not provide additional information in this proceeding to justify a modification to the

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<sup>38</sup> Revised tariff pages can be submitted to the Commission without a description page or a request for approval; a tariff application is not required.

<sup>39</sup> SLAs specify performance targets, service availability, and penalties for failure to meet those targets.

<sup>40</sup> A VLAN is a logical group of workstations, servers, and network devices that appear to be on the same local area network (LAN) despite their geographical distribution.

SLAs. Accordingly, the Commission considers that there is no need at this time to revise the SLAs for Wholesale Connect service.

164. However, given that this is a new service, the Commission will monitor its performance in order to evaluate if SLA targets are being met. Northwestel is directed to file annually information showing the performance levels for Wholesale Connect service that the company attained for the previous year compared to the SLAs. This information is to be submitted coincident with the Commission's reporting requirements on the implementation of the Plan, as set out in this decision.
165. The Commission notes that Northwestel did not specifically address SSI's request regarding VLANs. Notwithstanding this, the Commission expects Northwestel to evaluate whether the current VLAN limitations in the Wholesale Connect service tariff are still appropriate and to respond to competitors regarding their concerns.
166. For SSI's remaining requests to modify Wholesale Connect service, the Commission expects Northwestel to respect the commitments it has made, as noted above.

***Ice/Iristel's request***

167. Ice/Iristel initially requested that Wholesale Connect service be modified to include (i) a termination point in Edmonton, (ii) a carrier grade interconnection point, (iii) a demarcation point upgraded to a higher-capacity router, (iv) a demarcation point with higher redundancy, and (v) peer-to-peer interconnection. However, they later indicated that they could use Wholesale Connect service as approved despite these limitations, but maintained their request with respect to peer-to-peer interconnection.
168. Northwestel responded that it is prepared to develop peer-to-peer interconnection arrangements, which may involve detailed network design and alignments on key technical and business criteria.
169. In light of the above, the Commission expects Northwestel to proceed with discussions with Ice/Iristel to develop peer-to-peer interconnection arrangements.

***Allstream's request***

170. Allstream requested that Wholesale Connect service be amended as follows: (i) unbundle the access and transport components and require that multiple accesses be available within each community, (ii) provide 10 VLANs for each end-customer location served within each community, and (iii) provide an option such that Northwestel would provide and manage the associated equipment or permit the competitor to do so itself.
171. The Commission considers that there is insufficient evidence in this proceeding to justify Allstream's request to unbundle the access and transport components in the Wholesale Connect service monthly rates. Accordingly, the Commission determines that it is not appropriate to require Northwestel to unbundle these components.

172. With respect to Allstream's request for multiple accesses to end-customers, the Commission notes that Wholesale Connect service provides one access in each community. However, if a service provider requires multiple accesses per community, it can purchase other services from Northwestel or build its own facilities. Accordingly, the Commission determines that it is not necessary for Northwestel to include multiple accesses as a component of Wholesale Connect service.
173. With respect to Allstream's request for 10 VLANs per end-customer per community, as stated above, the Commission expects Northwestel to evaluate the current VLAN limitations in the Wholesale Connect service tariff.
174. With respect to Allstream's request that the Wholesale Connect service tariff include terms and conditions that pertain to the provision and management of equipment, the Commission notes that there are other options, such as a customer-specific arrangement, that Allstream can use to meet its needs. As an alternative, it could acquire end-to-end retail services such as V-Connect.<sup>41</sup> Accordingly, the Commission determines that there is no requirement to include such terms and conditions in the Wholesale Connect service tariff.

#### ***TCC's request***

175. TCC submitted that there are several limitations of Wholesale Connect service which do not make it suitable to serve TCC's large national customers. TCC further added that the ideal solution would be to have end-to-end service available in terrestrially and satellite-served communities. TCC indicated that, as an alternative, it could use the currently tariffed V-Connect service and a tariffed Ethernet Wide Area Network (E-WAN) service.<sup>42</sup> TCC also requested that Northwestel review the limitations on VLANs.
176. Northwestel submitted that there are alternative services that TCC can purchase to meet its needs for an end-to-end solution. Northwestel further submitted that, for TCC's requirements, V-Connect would be the best option, as there is no need to have a point of presence in any community and it is a true end-to-end service. Northwestel noted that TCC had indicated that it could use retail tariffs to meet its needs to service national accounts.
177. The Commission notes that Northwestel has identified alternative services that TCC can use to obtain an end-to-end service. Therefore, the Commission finds that it is not necessary for Northwestel to make TCC's requested modifications to its Wholesale Connect service. With respect to the limitations on VLANs, the Commission has addressed this issue above.

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<sup>41</sup> V-Connect service is a retail business service that is used to create wide area networks by providing site-to-site connections that can cover large geographic areas.

<sup>42</sup> E-WAN is a high-capacity layer 2 service that allows a customer in Northwestel's operating territory to connect to a second location outside the company's operating territory. In this proceeding, TCC requested that Northwestel be required to file tariffs for its E-WAN service.

### **I-Gate service**

178. I-Gate service is a retail Internet and transport service used by both business customers and competitors.
179. In this proceeding, the Commission requested comments on whether Northwestel's I-Gate service should be tariffed. No party specifically requested that it be mandated as a wholesale service. Accordingly, the Commission determines that Northwestel is not required to provide its I-Gate service on a wholesale basis.
180. The issue of whether tariffs are required for this service on a retail basis is addressed in section IV of this decision.

### **Gateway service**

181. Allstream requested that the Commission require Northwestel to provide a wholesale gateway service<sup>43</sup> between Northwestel's territory and the rest of Canada, submitting that Northwestel's monopoly on gateway services connecting the North to southern Canada was a significant barrier to competition and conferred an undue preference on Northwestel and its affiliates.
182. Ice/Iristel considered that Northwestel should offer a tariffed gateway service between High Level and Edmonton, Alberta. Ice/Iristel were of the view that competitors are required to do a significant amount of work and coordination to connect High Level and Edmonton in the absence of such a service offered by Northwestel.
183. The Commission notes that Northwestel does not use its own facilities to provide gateway service to itself, but rather obtains such services from another service provider outside its operating territory. The Commission also notes that gateway services are available directly from other service providers. For example, Alberta SuperNet, Bell Canada, and TCC provide this service between High Level and Edmonton.
184. The Commission's practice is to not require ILECs to provide services or facilities outside their operating territories. Accordingly, the Commission determines that Northwestel is not required to provide a wholesale gateway service as requested by parties in this proceeding.

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<sup>43</sup> A gateway service connects two networks. In this case, this service would connect Northwestel's network to another network outside its operating territory.

## Local interconnection regions (LIRs)

185. LIRs<sup>44</sup> provide increased efficiencies and lower costs of interconnection for local service competitors. In Telecom Notice of Consultation 2012-669, the Commission asked whether interconnection on the basis of LIRs in Northwestel's operating territory was appropriate in light of the expected changes to Northwestel's network infrastructure resulting from the Plan, and, if so, when and on what basis LIRs should be established.
186. Northwestel proposed establishing LIRs using territorially defined administrative regions where reasonable and appropriate. Where such regions are lacking, the company proposed using social and cultural interactions to identify and designate communities of interest. Northwestel further proposed that in cases where an exchange is served by a remote switch, the exchange would be included in the LIR of the exchange of the host switch.
187. Northwestel also proposed that a community should be excluded from an LIR if it does not have an LNP-capable switch. Northwestel submitted that an LNP-capable switch has Common Channel Signalling 7 (CCS7)<sup>45</sup> and billing capability, which makes routing simple and billing much more efficient. As well, communities served by satellite services should be excluded from LIRs to avoid double satellite hops, which results in additional latency and reduced service quality.
188. Therefore, Northwestel proposed establishing 10 LIRs across its operating territory, and including 49 terrestrial communities in those 10 LIRs by the end of the implementation of the Plan. Northwestel noted that its proposal would result in 9 terrestrial communities being excluded from LIRs because those communities would not have an LNP-capable switch by the end of the implementation of the Plan.
189. All parties to this proceeding that commented on this issue were in favour of the establishment of an LIR regime in Northwestel's operating territory and supported excluding satellite communities.
190. However, Ice/Iristel argued that larger LIRs were more appropriate in the North, and proposed two or three LIRs in each of Yukon and the Northwest Territories. Ice/Iristel were of the view that the amount of traffic generated in an additional LIR was likely to be relatively small in relation to building an additional point of interconnection because of the smaller population and the concentration of population in Whitehorse and Yellowknife.

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<sup>44</sup> An LIR is a group of exchanges that allows competitors to access more ILEC customers from a single point of interconnection. The LIR framework for ILECs, other than Northwestel and the small ILECs, was established in Telecom Decision 2004-46 and finalized in Telecom Decision 2006-35.

<sup>45</sup> CCS7 is the digital signalling system used by the telephone companies to route telephone calls and to provide other services.

191. SSi was of the view that one LIR per territory made sense for terrestrially served areas. SSi stated that it did not believe that the size of the LIRs proposed by Northwestel would result in increased transport interconnection costs.
192. Northwestel responded that its proposal for 10 LIRs was more appropriate than creating a smaller amount of very large LIRs covering its operating territory, arguing that overly large LIRs would increase the risk of loss of service and access to emergency services in the event of fibre cuts.

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

193. The Commission notes that defining LIRs is an exercise that balances the needs of competitive local exchange carriers (CLECs) and ILECs. Specifically, LIRs should be large enough such that a CLEC's local interconnection costs are lowered, while the LIRs should not be so large that the ILEC's transport costs are significantly increased.
194. The Commission considers that creating only one or two LIRs to cover all of Yukon and the Northwest Territories would create very large LIRs, which would result in inefficient transport of local traffic over very large distances and would likely increase Northwestel's transport costs significantly as well as the risk of outages. The Commission notes that Ice/Iristel and SSi did not provide any evidence to support their argument that larger LIRs would not result in significantly higher transport costs for Northwestel.
195. The Commission considers that Northwestel's proposed LIRs are appropriately sized and reflect communities of interest and host/remote switch arrangements. The Commission also considers that the exclusion of satellite communities and communities without LNP-capable switches from LIRs is reasonable, given that including such communities would make interconnection less efficient and more expensive. Accordingly, the Commission approves Northwestel's proposal for LIRs in its operating territory, as provided in Appendix 1 to this decision.
196. The Commission considers that Northwestel should provide sufficient notice to interconnected carriers of the addition of any communities to LIRs as a result of a switch upgrade. Accordingly, the Commission directs Northwestel to provide to CLECs operating in its operating territory a forecast of exchange or LIR boundary changes that Northwestel anticipates will be implemented during the following calendar year. For the 2014 forecast, Northwestel is to provide this information by 15 January 2014. For each subsequent year's forecast, this information is to be provided by no later than 31 December of the previous year. Further, Northwestel shall provide to CLECs at least six months' prior notice of any exchange or LIR boundary modifications affecting the territory served by the CLEC.

### **IV. Regulation of certain retail services**

197. The Commission has the power, pursuant to section 34 of the Act, to forbear from the exercise of certain of its powers and duties in respect of services or classes of

services, based on findings of fact that the Act authorizes the Commission to make. This includes the authority to refrain from requiring carriers to file tariffs for Commission approval.

198. In Telecom Decision 94-19, the Commission established a framework to consider whether to forbear from regulation pursuant to section 34 of the Act. In that decision, the Commission noted that the first step in assessing whether it is appropriate to forbear involves defining the relevant market. The relevant market is essentially 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, demand and supply conditions, the likelihood of entry into the market, barriers to entry into the market, and evidence of rivalrous behaviour.
199. In this proceeding, several parties proposed that certain retail services offered by Northwestel, namely Internet<sup>46</sup> and E-WAN services, should be provided pursuant to tariffs.

### **Retail Internet services**

200. In Telecom Order 98-619, the Commission forbore, pursuant to subsections 34(1) and 34(2) of the Act, from the regulation of Northwestel's retail Internet services with respect to sections 24 (in part), 25, 29, and 31 and subsections 27(1), 27(3) (in part), 27(5), and 27(6) of the Act.<sup>47</sup>
201. The GNWT, YG, and Ice/Iristel submitted that forbearance from the regulation of Northwestel's retail Internet services should be revoked. They considered that regulation is required because the retail Internet services market in Northwestel's operating territory has limited competition and there is insufficient consumer protection in the absence of competitive alternatives.
202. Northwestel argued that the Commission must find that certain conditions are met before it can reverse a forbearance ruling and re-establish rate regulation for a service. Northwestel considered that the first step requires a demonstration that a review of forbearance is appropriate, including demonstrating that the circumstances that justified the original forbearance determination are no longer present.
203. Northwestel considered that the second step must show that continued forbearance would be inconsistent with the Act, based on the record of a complete forbearance proceeding, including consideration of the policy objectives set out in section 7 of the Act.

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<sup>46</sup> This includes services such as residential Internet, business Internet, and I-Gate.

<sup>47</sup> Forbearance was conditional on the establishment of an approved accounting separation for Internet services. Approval was granted in Telecom Order 99-625.

204. Northwestel submitted that, based on the record of this proceeding, the conditions for reversing a forbearance ruling had not been met and, therefore, that rate regulation for its retail Internet services should not be re-established.
205. Notwithstanding that view, Northwestel argued that, based on a Telecom Decision 94-19 analysis (Decision 94-19 analysis), forbearance is still warranted.
206. In that regard, Northwestel estimated that it does not have a significant market share in the retail Internet services market.
207. With regard to supply conditions, Northwestel argued that barriers to entry are already minimal, as there are facilities available to competitors that they can use to provide Internet services. Northwestel considered that in satellite-served communities, competitors have access to transport facilities provided by alternative providers (e.g. Telesat), while in terrestrially served communities, competitors have access to its tariffed facilities or, in some cases, an alternate provider's facilities. Northwestel also considered that its Wholesale Connect service has largely removed any barriers to entry regarding backhaul costs in terrestrially served communities.
208. With regard to demand conditions, Northwestel argued that there are no significant barriers to entry. It submitted that (i) the cost for a customer to switch Internet service providers (ISPs) is not significant, (ii) customers can switch ISPs easily, (iii) customers are aware of national pricing of ISPs' plans, and (iv) competitive ISPs have sufficient capacity to fulfill demand.
209. Northwestel also submitted that the rates for its retail Internet services are affordable even without regulation, noting that the cost of providing services in the North is inherently higher than in southern Canada and that it had reduced overage charges by 50 percent in the past two years.
210. Notwithstanding Northwestel's opposition to the re-establishment of rate regulation for its retail Internet services, the company submitted that there are two very distinct markets for these services – terrestrial and satellite – which should be analyzed separately.

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

211. In order to determine whether the sections of the Act that were the subject of forbearance should be reapplied in whole or in part, the evidence should demonstrate that the circumstances that gave rise to forbearance have changed to such an extent that the Commission's original findings are no longer consistent with section 34 of the Act. The Commission considers that the examination of this evidence should be made based on the criteria set out in Telecom Decision 94-19, which are referenced earlier in this decision. The Commission addresses the application of the Telecom Decision 94-19 criteria in the following paragraphs.
212. With respect to the definition of the relevant product market, the Commission notes that certain retail Internet services in Northwestel's operating territory are

provisioned, in whole or in part, using satellite facilities (satellite retail Internet services). The Commission also notes that the rates for these services are generally more expensive than terrestrial retail Internet rates for comparable speeds. Further, the maximum speed for satellite retail Internet services is much lower than the maximum speed for terrestrial retail Internet services. In addition, satellite retail Internet services experience latency, which affects the quality and delivery of real-time services.

213. Accordingly, the Commission considers that satellite retail Internet services are not substitutes for terrestrial retail Internet services, and determines that satellite retail Internet services are in a different relevant product market than terrestrial retail Internet services. Further, the Commission considers that the relevant geographic market for each service is Northwestel's operating territory.
214. With regard to Northwestel's satellite retail Internet services, the Commission finds that, based on the record of this proceeding, the circumstances that justified its original forbearance determinations have not changed sufficiently to warrant a reversal of forbearance. In this regard, the Commission notes that the presence of a competitor in the satellite retail Internet services market indicates that customers have an alternative to Northwestel. The Commission also notes that Northwestel does not control the facilities that competitors require to provide satellite retail Internet services. Therefore, the Commission considers that Northwestel does not have market power in the satellite retail Internet services market and determines that these services will continue to be forborne from regulation.
215. With respect to Northwestel's terrestrial retail Internet services, the Commission notes that at the time of Telecom Order 98-619 (i) there were 19 ISPs other than Northwestel providing service in its operating territory, and (ii) Northwestel's market share was less than 10 percent. The Commission considers that, based on information submitted in confidence on the record of this proceeding, Northwestel is now the dominant provider of terrestrial retail Internet services in its operating territory.
216. In regard to demand conditions, the Commission notes that there are few competitive alternatives to Northwestel's terrestrial retail Internet services. In particular, the Commission considers that mobile wireless data services are not widely available in Northwestel's operating territory. Further, there is insufficient evidence on the record of this proceeding to determine whether mobile wireless data services are substitutes for terrestrial retail Internet services. In addition, the Commission considers that services offered by companies affiliated with Northwestel, such as Bell Mobility Inc. and Latitude Wireless Inc., are not true alternatives within the context of a Decision 94-19 analysis. The Commission is therefore not persuaded that demand conditions are such that customers could find substitutes for Northwestel's retail Internet services in terrestrial markets in response to an increase in prices for these services.

217. Regarding supply conditions, the Commission considers, in contrast to the findings in Telecom Order 98-619, that the record of this proceeding demonstrates that the terrestrial retail Internet services market in Northwestel's operating territory is currently not characterized by active price competition and rivalrous behaviour. The Commission has not found evidence of falling prices, vigorous and aggressive marketing activities, or an expanding scope of activities by competitors in terms of products, services, and geographic behaviour.
218. With regard to Northwestel's submission that the availability of Wholesale Connect service will enable competitors to enter the market, the Commission considers that it is premature to evaluate the impact that this service will have on the competitiveness of the market. In that regard, the Commission notes that Northwestel's Wholesale Connect service was just recently introduced, and that revised rates for this service are set out in this decision.
219. Accordingly, with regard to Northwestel's terrestrial retail Internet services, the Commission finds that, based on the record of this proceeding, the circumstances that justified its original forbearance determinations have changed since the issuance of that determination and that Northwestel now has significant market power in the terrestrial retail Internet services market.
220. The Commission considers that, because of Northwestel's market power, the achievement of the policy objectives set out in section 7 of the Act would be undermined by the continued forbearance of the company's terrestrial retail Internet services. In this regard, the Commission considers that continued reliance on market forces alone in the terrestrial retail Internet services market will not ensure that rates for these services are affordable, consistent with paragraph 7(b) of the Act. The Commission also considers that, while Northwestel's new Wholesale Connect service removes a significant barrier to entry in this market, the mere introduction of this service does not guarantee sustainable competition sufficient to protect the interests of northern Canadians.
221. In light of all the above, pursuant to subsection 34(1) of the Act, the Commission finds as a question of fact that to continue to refrain from exercising its powers and performing its duties in relation to the regulation of Northwestel's terrestrial retail Internet services, would not be consistent with the policy objectives set out in section 7 of the Act. Further, pursuant to subsection 34(2) of the Act, the Commission finds as a question of fact that Northwestel's terrestrial retail Internet services are no longer subject to a level of competition sufficient to protect the interests of users of these services and that it is no longer appropriate to refrain from regulating Northwestel's terrestrial retail Internet services.
222. Accordingly, the Commission declares that the offering and provision of Northwestel's terrestrial retail Internet services shall be subject to the Commission's powers and duties under sections 24, 25, 27, 29, and 31 of the Act.

223. Therefore, the Commission directs Northwestel to file tariffs for its terrestrial retail Internet services by **4 February 2014**, and associated cost studies by **6 March 2014**. This determination applies to all of Northwestel's terrestrial retail Internet services, including its residential Internet, business Internet, I-Enterprise, I-Gate, I-Hotel, and Public Enterprise services.

#### **Restriction on subscribing to stand-alone retail Internet service**

224. Ice/Iristel noted that Northwestel requires its retail Internet service customers to also subscribe to PES. Ice/Iristel submitted that, as VoIP service providers, they are at a competitive disadvantage as a result of Northwestel not providing retail Internet access service independent from its PES.

225. Northwestel stated that it provides retail Internet access service independent from its PES in its cable territory, but that the service is not currently available to its customers receiving digital subscriber line (DSL) Internet access service. Northwestel committed to offering retail DSL Internet access service independent from its PES in its terrestrial communities for an additional fee.

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

226. The Commission notes that Northwestel's commitment to offer its retail DSL Internet access service independent from its PES would be consistent with previous Commission decisions on this matter.<sup>48</sup>

227. The Commission considers that offering retail DSL Internet access service independent from PES constitutes the removal of a restriction on retail DSL Internet access service, not the creation of a new service. Accordingly, the Commission determines that it would not be appropriate for Northwestel to charge an additional fee for providing its retail DSL Internet access service independent from its PES.

228. Therefore, the Commission directs Northwestel to provide retail DSL Internet access service independent from its PES and to reflect this determination in any current or future tariffs for retail DSL Internet access service. Northwestel is to file any amendments to existing tariffs by **4 February 2014**. Where tariffs are not required for retail DSL Internet access service, the Commission expects Northwestel to provide the service independent from its PES.

#### **E-WAN service**

229. E-WAN is a high-capacity layer 2 service that allows a customer in Northwestel's operating territory to connect to a second location outside the company's operating territory.

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<sup>48</sup> See Telecom Decisions 2003-49 and 2004-34.

230. TCC submitted that Northwestel's E-WAN service should be tariffed, arguing that Northwestel is not subject to any Commission WAN forbearance orders, and that Northwestel has market power in its operating territory with respect to the provision of E-WAN services.
231. In response, Northwestel noted that, in Telecom Order 97-572, the Commission forbore from regulating, among other things, Northwestel's future packet data services. Northwestel argued that its E-WAN service, which, as a layer 2 WAN service, does not provide class of service capability (i.e. prioritization of traffic), falls under the definition of a packet data service and is therefore forborne from regulation. According to Northwestel, its E-WAN service is therefore in a different market than its other WAN services, such as V-Connect, which do have class of service capability. For this reason, Northwestel maintained that the Commission's recent determinations<sup>49</sup> that Northwestel has market power with respect to the provision of WAN services, including V-Connect, do not apply to E-WAN service.
232. Northwestel also argued that forbearance from the regulation of its E-WAN service throughout its operating territory continues to be warranted. Northwestel considered that SSI's satellite WAN services offered in the Northwest Territories and Nunavut are a competitive alternative to Northwestel's services. Northwestel also argued that facilities-based access service providers have access to Northwestel's and alternate providers' services at comparable rates.
233. With regard to supply conditions, Northwestel argued that barriers to entry are minimal. It submitted that, in satellite-served communities, alternative access facilities necessary to provide WAN services are available to competitors from SSI, and transport facilities are available from Telesat. In terrestrially served communities, Northwestel submitted that competitors have access to Northwestel's tariffed services or, in some cases, SSI's facilities.

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

234. Notwithstanding that Northwestel's E-WAN service does not have class of service capability, similar to packet data services which were forborne from regulation in Telecom Order 97-572, the Commission considers that the E-WAN service has the characteristics of a WAN service. The Commission notes that Northwestel's E-WAN service allows a customer's premises in Northwestel's operating territory to connect to a second location outside Northwestel's operating territory (i.e. site-to-site connections that can cover large areas). The Commission considers that Northwestel's description of its E-WAN service is consistent with how the Commission has defined WAN services in past decisions.
235. As a result, the Commission is of the view that the E-WAN service belongs to the WAN services product market. In Telecom Decision 2012-644, the Commission determined that Northwestel had market power in its operating territory with respect

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<sup>49</sup> See Telecom Decision 2012-644.

to the provision of WAN services and denied forbearance for Northwestel's WAN services. Therefore, the Commission determines that Northwestel's E-WAN service was not previously forborne from regulation. The ratification of rates for E-WAN service provided by Northwestel prior to the date of this decision is addressed below.

236. The Commission notes that the regulation of Northwestel's WAN services has been addressed in recent decisions, specifically Telecom Decisions 2012-644 and 2013-710. Given the determination above that E-WAN is a WAN service, these decisions therefore apply to Northwestel's E-WAN.

237. In Telecom Decision 2012-644, the Commission concluded that Northwestel possesses market power in its operating territory with respect to WAN services. In Telecom Decision 2013-710, issued today, the Commission varies that decision and makes the following determinations: 1) terrestrial and satellite WAN services are in different product markets, and 2) the Commission forbears from the regulation of satellite WAN services since Northwestel does not have market power in the market for these services.

238. Pursuant to the above, the Commission directs Northwestel to file tariffs for its terrestrial E-WAN service by **4 February 2014**, and associated cost studies by **6 March 2014**.

239. With respect to the ratification of rates previously charged for the provision of E-WAN service,<sup>50</sup> the Commission is satisfied that these rates were charged without an approved tariff due to an error, namely Northwestel's belief that E-WAN service had previously been forborne from regulation. The Commission considers that ratifying these rates would provide certainty to past and existing customers for E-WAN service, as well as for Northwestel.

240. Therefore, in light of the circumstances, the Commission ratifies the rates charged for E-WAN service prior to the date of this decision.

## **V. Local forbearance framework**

241. The Commission established forbearance frameworks for retail local exchange services for the large and small ILECs in Telecom Decision 2006-15 and Telecom Regulatory Policy 2009-379, respectively. In addition to the competitor presence test,<sup>51</sup> an ILEC must demonstrate that the quality of service standard is met with respect to services provided to competitors in its territory.

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<sup>50</sup> Pursuant to subsection 25(4) of the Act, the Commission may ratify the charging of a rate by a Canadian carrier otherwise than in accordance with a tariff approved by the Commission if it is satisfied that the rate was charged because of an error or other circumstance that warrants the ratification.

<sup>51</sup> For residential local exchange services, at least two other independent facilities-based service providers (at least one of which is fixed-line) must be capable of serving at least 75 percent of the ILEC's residential lines in the exchange. For business local exchange services, at least one other independent facilities-based, fixed-line telecommunications service provider must be capable of serving at least 75

242. The Commission permitted local competition in Northwestel's operating territory in Telecom Regulatory Policy 2011-771, but did not establish a framework for forbearing from the regulation of Northwestel's retail local exchange services.
243. Northwestel submitted that local competition has just begun in the North, and that until further experience is gained in respect to how competitors choose to serve customers in northern Canada, it would be very difficult to establish specific rules, thresholds, or benchmarks for local forbearance as set out in either the large or small ILEC tests.
244. Northwestel did not propose any streamlined framework or test for local forbearance, but did reserve the right to propose a framework at a future time and/or apply for local forbearance under the criteria set out in Telecom Decision 94-19.
245. PIAC and TCC supported the implementation of a framework for local forbearance for Northwestel.
246. TCC submitted that the competitor presence test threshold in Northwestel's operating territory should be set at 75 percent like the large ILECs, because Northwestel is the northern operating arm of the largest communications provider in Canada.
247. PIAC proposed a forbearance framework for Northwestel based on the current frameworks for small and large ILECs. PIAC stated that a competitor presence test based on a 50 percent threshold would be appropriate, based on the fact that many of the company's exchanges are characterized by low NAS density. PIAC also proposed to remove the requirement that at least one service provider, in addition to the ILEC, be a fixed-line telecommunications service provider.
248. Ice/Iristel and SSi submitted that it was too early to consider local service forbearance anywhere in Northwestel's operating territory. Ice/Iristel proposed a moratorium on any additional forbearance approvals until the new regulatory framework is established and has been operating for a reasonable amount of time.

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

249. The Commission notes that the rollout of competitive service offerings for Northwestel's retail local exchange service market has been limited to date. The Commission considers that the rollout of competition in the North is likely to be different than in southern Canada, as there are no significant alternative wireline networks in the North and competition is likely to develop in the form of wireless and VoIP services.
250. The Commission is of the view that the forbearance frameworks established for the small and large ILECs may not be appropriate for Northwestel. Specifically, the

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percent of the ILEC's business lines in the exchange. In certain circumstances, the competitor presence threshold for the small ILECs can be lowered to 50 percent.

Commission considers that different competitor presence tests may need to be developed given the different and unique competitive environment in which Northwestel is operating.

251. In light of the above, the Commission determines that it will not establish a local forbearance framework for Northwestel at this time.

## **VI. Regulatory framework and pricing flexibility for tariffed services**

### **Form of regulation**

252. Under the price cap regime established for Northwestel, regulated services are generally grouped into baskets that are subject to constraints at the overall basket level, the rate element level, or both. Northwestel's current basket structure is made up of six baskets: Residential Services, Business Services, Services with Frozen Rate Treatment, Other Capped Services, Competitor Services, and Uncapped Services.<sup>52</sup>
253. Northwestel proposed that no changes be implemented to the price cap basket and rate element constraints, and that the Commission fix the duration of the next price cap regime at four years, from 1 January 2014 to 31 December 2017. Northwestel submitted that maintaining the existing price cap basket structure will provide its customers with sufficient pricing protection, especially in light of the introduction of local competition, while still permitting the company some level of pricing flexibility.
254. Further, Northwestel proposed that all residential customers have their rates frozen for the next price cap period, and submitted that this will ensure that rates remain stable for these customers and that there is no change to the subsidy funding for the price cap period.
255. SSI supported implementing a new regulatory framework, which could be a split rate base regime or another approach, with the objective of treating backbone facilities and services as an essential public utility. SSI submitted that if the Commission decided to continue with a price cap regime, it should establish a new "Utility Backbone" basket, which would include Wholesale Connect, interexchange private line (IXPL), WAN, and other ancillary services that form part of the backbone network.
256. Ice/Iristel generally supported continuing with price cap regulation, but proposed using a split rate base regime to monitor utility services, including long-haul transit service, PES, and Internet access service. Ice/Iristel further proposed that the split rate base calculations be conducted annually, noting that this approach could assist the Commission in identifying anti-competitive behaviour.

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<sup>52</sup> See Appendix 1 of Telecom Regulatory Policy 2011-771 for a description of the current price cap framework.

257. TCC submitted that price cap regulation has superior incentive properties and is more compatible with an environment of increasing competition. PIAC submitted that forms of split rate base and a partial return to rate of return regulation entail considerable risk in exchange for potentially limited returns, at least in the short term, for communities, businesses, and individuals in the North. The GNWT submitted that a move back to rate of return regulation or the adoption of a split rate base would be too burdensome for all parties.
258. The GNWT submitted that a price cap basket and associated pricing constraints should be established for Northwestel's Internet services, as well as strengthened regulation of Northwestel's wholesale services, including the creation of a new basket for backbone monopoly services, and the inclusion of a productivity factor in establishing rate caps for individual services. PIAC submitted that the Commission should consider imposing a mechanism that would provide for financial consequences for failure to comply with quality of service standards.
259. YG submitted that the progress of competition in Northwestel's operating territory might be enhanced by applying a different treatment – specifically in terms of markup – to the Competitor Services basket as an incentive to spur development and improve efficiency.

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

260. While several parties proposed that elements of a split rate base regime and rate of return regulation should be implemented for Northwestel, the Commission is of the view that these forms of regulation would result in considerable regulatory burden, such as the allocation of costs between Utility and Competitive segments as well as annual detailed reviews by the Commission of the company's financial forecasts. The Commission considers that these forms of regulation would not be appropriate or efficient in the context of the Policy Direction or in an environment of increased competition.
261. The Commission notes that an objective of price cap regulation is to ensure customer access to services at just and reasonable rates when market forces alone are not sufficient. In addition to protecting customers, price cap regulation should provide a company with incentives to operate more efficiently and to be more innovative in the provision of services. The Commission considers that price cap regulation, including the requirement for tariffs for retail Internet and E-WAN services in terrestrially served communities, and the annual monitoring of the Plan discussed below, will provide sufficient regulatory oversight to ensure that consumers benefit from the regulatory framework. The Commission also considers that the inclusion of specific factors for productivity and quality of service in Northwestel's price cap regime would not be appropriate given the network changes in the implementation of the Plan during the next price cap period.
262. With respect to the proposal to create a new Utility basket for backbone and related services, the Commission notes that Wholesale Connect service is currently included

in the Competitor Services basket. Proposed rate changes for services in this basket are considered on a case-by-case basis. Other backbone-type services, such as V-Connect, are retail services used by both business customers and competitors, and most are subject to price cap regulation. Given the different pricing policies for retail and wholesale services, the Commission considers that combining these two types of services into one basket would not be appropriate. Accordingly, the Commission determines that it is not necessary to create a new Utility basket for backbone and related services.

263. In light of the above, the Commission finds that price cap regulation using the current basket structure and pricing constraints, subject to the adjustments outlined below, continues to be the appropriate form of regulation for Northwestel's tariffed services.
264. As determined in this decision, Northwestel will be required to impute annual inflation increases to its residential local rate component for the calculation of its HCSA PES subsidy starting in June 2014, which will result in an annual reduction in subsidy. Accordingly, the Commission determines that the Residential Services basket is to be split into HCSA and Non-HCSA baskets. The basket constraint for the Residential HCSA Services basket will be the rate of inflation, and will provide Northwestel with the flexibility to raise the local rates in HCSAs to compensate the company for the reduction in subsidy. The rates for services in the Residential Non-HCSA Services basket will remain frozen.
265. In addition, as determined in this decision, the Commission will regulate Northwestel's rates for E-WAN and retail Internet services in terrestrially served communities. Consistent with the basket assignment of similar services, such as V-Connect, Northwestel is directed to include terrestrial E-WAN service in the Other Capped Services basket. As discussed below, the Commission will conduct a follow-up proceeding to consider the appropriate basket structure and pricing constraints for terrestrial retail Internet services.
266. The Commission directs Northwestel to file an application by **4 February 2014** with a proposal for the basket structure and pricing constraints for terrestrial retail Internet services. In the interim, the Commission finds it appropriate to place these services into a Retail Internet Services basket and to cap the rates for these services at their current rates pending completion of the follow-up proceeding.
267. In light of the above, the Commission determines the basket structure for Northwestel's regulated retail and wholesale services will be made up of the following baskets: Residential Non-HCSA Services, Residential HCSA Services, Business Services, Other Capped Services, Retail Internet Services, Services with Frozen Rate Treatment, Competitor Services, and Uncapped Services. Details of the approved price cap basket structure and the upward pricing constraints are provided in Appendix 3 of this decision.

268. The Commission considers that a four-year period for the new regime would result in a review of Northwestel's framework beginning in early 2017, which would coincide with the proposed completion of the Plan. The Commission further considers that a review at that time would be appropriate as it would allow for a thorough assessment of the impact of the Plan. Accordingly, the Commission determines that the next price cap regime will be in effect for four years, with a review of the regime expected to commence in 2017.

### **Pricing flexibility**

269. In order to increase competitiveness and reduce regulatory burden, the Commission has made a number of decisions that give the other ILECs greater flexibility in the pricing of certain services. In this regard, the Commission streamlined the regulatory rules for bundles, promotions, and market trials.<sup>53</sup> The Commission also permitted these ILECs to use rate ranges and rate de-averaging<sup>54</sup> in the pricing of regulated services.

270. Northwestel submitted that it would be appropriate to allow it to use rate ranges and rate de-averaging for tariffed services in the same manner as all other ILECs. Northwestel further submitted that such flexibility would be appropriate in view of the introduction of local competition in the North, and the fact that the price cap framework provides safeguards for both customers and competitors.

271. Northwestel also submitted, with respect to pricing flexibility, that the current rules as they apply to bundles, market trials, and promotions remain appropriate, and did not propose any changes to these policies applicable to the company.

272. The GNWT submitted that Northwestel has not made a case for removing the existing restrictions on rate de-averaging and the use of rate ranges. The GNWT submitted that local competition has only recently been permitted in the North and that it is not yet clear how such competition will develop.

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

273. As noted above, the Commission has approved additional flexibility in competitive markets in the pricing of most retail services for all other ILECs through the use of rate ranges and rate de-averaging. The Commission considers that the rollout of competition in the North is likely to be different than in southern Canada and that Northwestel has significant market power in many markets in its operating territory (e.g. local, retail Internet access in terrestrial communities). Given the current state of competition in Northwestel's operating territory, the Commission considers that providing Northwestel with additional pricing flexibility at this time through the use of rate ranges could be detrimental to the development of competition.

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<sup>53</sup> See Telecom Decisions 2007-117 and 2008-41.

<sup>54</sup> Rate ranges and rate de-averaging permit an ILEC to price a regulated service at different levels within an exchange.

274. With respect to the issue of rate de-averaging, the Commission considers that this pricing policy implemented at the rate band or sub-band level allows an ILEC to better price services to recognize cost differences between bands. The Commission considers that providing Northwestel this flexibility in its operating territory would be appropriate.
275. Accordingly, the Commission denies Northwestel's request for additional pricing flexibility on certain retail services through the use of rate ranges at this time, but allows Northwestel to de-average its rates for services only at the rate band level (i.e. Bands D and H1) for services in the Business Services basket, the Other Capped Services basket, and, where appropriate, the Competitor Services basket.
276. With respect to the Commission's policies regarding bundles, market trials, and promotions, these policies already apply to all other ILECs. The Commission considers that such pricing flexibility would permit Northwestel to provide customers with more responsive offers as market conditions evolve. Accordingly, the Commission finds that the policies related to bundles, market trials, and promotions will apply to Northwestel.
277. As noted above, the Commission may ratify the charging of a rate otherwise than in accordance with a tariff. The Commission is satisfied that where Northwestel has offered bundles, market trials, and promotions without an approved tariff, it did so under the belief that these policies applied to the company. Due to this error and the determination above that these policies now apply to Northwestel, the Commission finds it appropriate to ratify the rates previously charged for bundles, market trials, and promotions.

## **VII. Monitoring of the Modernization Plan**

278. Northwestel proposed to file annual reports with the Commission for each year of the five-year Plan, providing (i) a list of the major improvement projects undertaken in the past 12 months, including which communities were affected; (ii) a description of the benefits to customers, in terms of the availability of services, speed enhancements, or other benefits, delivered as a result of the improvements; and (iii) an update on the overall progress of the Plan. The company proposed to file the first annual report in the first quarter of 2014 for the calendar year 2013, which is the first year of the Plan.
279. In the event that Northwestel fails to meet all of its objectives in two quarters within a pre-set period of time, PIAC suggested that the capped rates for the following year (Residential and Business Services baskets) should be subject to a modernization factor. PIAC stated that Northwestel should file quarterly reports in order to facilitate the implementation of the proposed modernization factor.
280. PIAC also submitted that another option to incent implementation of the Plan would be to withhold subsidy: a sanction could be applied to the "price" used in the subsidy calculation in order to reduce the amount of subsidy Northwestel receives. The factor

could be reversed once Northwestel returns to compliance with its milestones and objectives for the following 12-month period.

281. Similarly, the GNWT submitted that one way to ensure that Northwestel carries through with its Plan commitments would be to lower local rate levels below the levels that would otherwise be allowed. Alternatively, the rates could be lowered across a broader spectrum of services or in specific communities or for specific services that were negatively impacted by a failure to complete scheduled Plan work.
282. YG considered it appropriate to implement a productivity offset<sup>55</sup> in Northwestel's price cap formula. YG suggested that this productivity offset could be reduced if the company meets certain defined targets, such as increases in bandwidth, modernization, or extension of services to underserved communities.
283. Northwestel did not support linking the progress of implementation of the Plan to any form of penalty, such as withholding subsidy payments until certain milestones have been met. Northwestel submitted that such a mechanism would hinder the progress of the implementation of the Plan, as the primary driver of contingency in the Plan is funding (for example, revenues received from services sold, subsidy from the NCF, or third-party funding where available).
284. Northwestel also submitted that a penalty plan would be difficult to design and onerous to administer, as the Commission would have to take every milestone or element in the Plan and assign a value to it, for each community, for wireless, high-speed Internet, and other services.

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

285. In order to properly monitor the rollout of the Plan, the Commission considers that regular reporting of the progress is essential. Accordingly, Northwestel is directed to file annual reports with the Commission for each year of the Plan, providing the information set out in paragraph 278 above.
286. The Commission notes that in Attachments 1 to 7 of the Plan, Northwestel identified the timelines by which service improvements would be rolled out to each community. If Northwestel fails to meet a target, the company is to indicate how and when it will meet the commitment. The report is to also contain any proposed update to the rollout schedule, with supporting rationale.
287. The Commission notes that Northwestel committed to providing ongoing updates to the Commission related to third-party funding and solutions for fixed wireless switch limitations. In addition, as determined above, Northwestel is to file annually information related to the SLAs for Wholesale Connect service. Accordingly, these updates are also to be filed with Northwestel's annual report on the progress of the

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<sup>55</sup> The productivity offset would reflect the assumption that Northwestel could become more productive, for example, through reductions in input costs.

implementation of its Plan. In addition, the Commission requires Northwestel to file annually the company's financial statements at the same time that it files its monitoring report to supplement the monitoring of the Plan.

288. The first annual report for the calendar year 2013 is to be filed by the end of the first quarter of 2014. Each subsequent annual report is to be filed by the end of the first quarter of the following year.
289. The Commission considers that the design of a regime with measures to incent Northwestel to fulfill its commitments, such as the linking of specific parameters of the price cap regime to the implementation of the Plan, would be too onerous, considering the various scenarios of compliance or non-compliance that could occur, as well as any adjustments that could be made to the Plan as it is rolled out. However, should Northwestel not meet the targets of its Plan, the Commission will consider taking appropriate action to ensure that the Plan is implemented as planned and in a timely manner.

### **Policy Direction**

290. The Commission considers that the determinations made in this decision are consistent with the Policy Direction for the reasons set out below.
291. 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.
292. The regulatory measures under consideration in this decision relate to price cap regulation, subsidy calculations, and the pricing of Northwestel's Wholesale Connect service. In addition, the issue of whether to forbear from the regulation of certain services was under consideration. Therefore, subparagraphs 1(a)(i) and (ii)<sup>56</sup> and subparagraphs 1(b)(i) and (ii)<sup>57</sup> of the Policy Direction apply to the Commission's determinations in this decision.
293. Consistent with subparagraph 1(a)(i) of the Policy Direction, the Commission has, in the case of pricing rules, relied to the maximum extent feasible on market forces in providing pricing flexibility to Northwestel (e.g. flexibility with respect to bundles, market trials, and promotions, and a certain level of pricing flexibility when facing

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<sup>56</sup> 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."

<sup>57</sup> 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, and (ii) if they are of an economic nature, neither deter economically efficient competitive entry into the market nor promote economically inefficient entry."

competition, but pricing constraints where market forces are limited). In the case of satellite retail Internet and satellite E-WAN services, the Commission has also relied on market forces to the maximum extent by forbearing from the regulation of these services.

294. 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 continue price cap regulation with minor modifications, to require Northwestel to file tariffs for only its terrestrial retail Internet and E-WAN services, to establish LIRs in a manner that reflects Northwestel's operating territory, and to monitor the Plan's implementation. In addition, the Commission notes its determination that the Wholesale Connect service rates approved in this decision balance the needs of Northwestel and its competitors in the marketplace. The Commission further notes the determination that, without its intervention, the digital divide within Northwestel's operating territory would not be resolved by relying on market forces alone.

295. 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 Act<sup>58</sup> are advanced by the regulatory measures established in this decision.

Secretary General

### Related documents

- *Northwestel Inc. – Application to review and vary Telecom Decision 2012-644 regarding V-Connect service*, Telecom Decision CRTC 2013-710, 18 December 2013
- *Final 2013 revenue-percent charge and related matters*, Telecom Decision CRTC 2013-630, 27 November 2013

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<sup>58</sup> 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;  
7(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;  
7(c) to enhance the efficiency and competitiveness, at the national and international levels, of Canadian telecommunications;  
7(f) to foster increased reliance on market forces for the provision of telecommunications services and to ensure that regulation, where required, is efficient and effective;  
7(g) to stimulate research and development in Canada in the field of telecommunications and to encourage innovation in the provision of telecommunications services; and  
7(h) to respond to the economic and social requirements of users of telecommunications services.

- *Northwestel Inc. – Wholesale Connect Service*, Telecom Order CRTC 2013-93, 25 February 2013
- *Review of Northwestel Inc.'s Regulatory Framework, Modernization Plan, and related matters*, Telecom Notice of Consultation CRTC 2012-669, 6 December 2012, as amended by Telecom Notices of Consultation CRTC 2012-669-1, 15 February 2013, and 2012-669-2, 30 April 2013
- *Northwestel Inc. – Application to review and vary Telecom Decision 2012-4 regarding V-Connect service*, Telecom Decision CRTC 2012-644, 26 November 2012
- *Astral broadcasting undertakings – Change of effective control*, Broadcasting Decision CRTC 2012-574, 18 October 2012
- *Northwestel Inc. – Review of regulatory framework*, Telecom Regulatory Policy CRTC 2011-771, 14 December 2011
- *Billing practices for wholesale residential high-speed access services*, Telecom Regulatory Policy CRTC 2011-703, 15 November 2011, as amended by Telecom Regulatory Policy CRTC 2011-703-1, 22 December 2011
- *Obligation to serve and other matters*, Telecom Regulatory Policy CRTC 2011-291, 3 May 2011, as amended by Telecom Regulatory Policy CRTC 2011-291-1, 12 May 2011
- *Revised guidelines for review and vary applications*, Telecom Information Bulletin CRTC 2011-214, 25 March 2011
- *Framework for forbearance from regulation of retail local exchange services in the serving territories of the small incumbent local exchange carriers*, Telecom Regulatory Policy CRTC 2009-379, 23 June 2009
- *Forbearance from the regulation of promotions for retail residential and business local wireline services*, Telecom Decision CRTC 2008-41, 22 May 2008
- *Review of general tariff bundling rules and requirements for market trials*, Telecom Decision CRTC 2007-117, 23 November 2007
- *Price cap regulation for Northwestel Inc.*, Telecom Decision CRTC 2007-5, 2 February 2007
- *Forbearance from the regulation of retail local exchange services*, Telecom Decision CRTC 2006-15, 6 April 2006, as amended by Order in Council P.C. 2007-532, 4 April 2007

- *Follow-up to Trunking arrangements for the interchange of traffic and the point of interconnection between local exchange carriers, Telecom Decision CRTC 2004-46, Telecom Decision CRTC 2006-35, 29 May 2006*
- *Trunking arrangements for the interchange of traffic and the point of interconnection between local exchange carriers, Telecom Decision CRTC 2004-46, 14 July 2004*
- *FCI Broadband – Request to lift restrictions on the provision of retail digital subscriber line Internet services to business customers, Telecom Decision CRTC 2004-34, 21 May 2004*
- *Call-Net Enterprises Inc. – Request to lift restrictions on the provision of retail digital subscriber line Internet services, Telecom Decision CRTC 2003-49, 21 July 2003*
- *Long-distance competition and improved service for Northwestel customers, Decision CRTC 2000-746, 30 November 2000*
- *Changes to the contribution regime, Decision CRTC 2000-745, 30 November 2000*
- *Telecom Order CRTC 99-625, 9 July 1999*
- *Telesat Canada – Transitional regulatory framework and forbearance for fixed satellite services, Telecom Decision CRTC 99-6, 25 May 1999*
- *Telecom Order CRTC 98-619, 23 June 1998*
- *Telecom Order CRTC 97-572, 29 April 1997*
- *Review of regulatory framework, Telecom Decision CRTC 94-19, 16 September 1994*

## Appendix 1

### Approved LIRs in Northwestel's operating territory

The following is a list of the LIRs in Northwestel's operating territory and the communities included in those LIRs. Communities initially included in an LIR are identified in bold. CLECs will be notified by Northwestel when communities are added to the LIR, as per the notification requirements detailed in this decision.

- 1) LIR name: Carmacks, Yukon  
Communities: Carmacks, Keno (Elsa), Mayo, Pelly Crossing, Stewart Crossing
- 2) LIR name: Destruction Bay, Yukon  
Communities: Beaver Creek, Burwash Landing, Destruction Bay
- 3) LIR name: Fort Good Hope, Northwest Territories  
Communities: Fort Good Hope, Tulita
- 4) LIR name: Fort Nelson, British Columbia  
Communities: **Fort Nelson**, Lower Post, Mould Creek, Muncho Lake, Pink Mountain, Prophet River, Toad River, Upper Halfway
- 5) LIR name: Hay River, Northwest Territories  
Communities: Enterprise, Fort Fitzgerald (Alberta), Fort Resolution, Fort Smith, Hay River, Kakisa
- 6) LIR name: Inuvik, Northwest Territories  
Communities: Aklavik, **Inuvik**, Tsiigehtchic
- 7) LIR name: Iskut, British Columbia  
Communities: Good Hope Lake, Iskut, Telegraph Creek
- 8) LIR name: Jean Marie River, Northwest Territories  
Communities: Fort Liard, Jean Marie River, Wrigley
- 9) LIR name: Whitehorse, Yukon  
Communities: Carcross, Champagne, Dawson City, Haines Junction, Marsh Lake, Ross River, Swift River, Tagish, Teslin, Upper Liard, Watson Lake, **Whitehorse**
- 10) LIR name: Yellowknife, Northwest Territories  
Communities: Behchoko (Rae/Edzo), Dettah, Wha Ti, **Yellowknife**

## Appendix 2

### Approved monthly rates for Wholesale Connect service

Basic class of service bandwidth	Type A	Type B	Type C	Breakout
<b>5 Mbps</b>	n/a	\$1,172	\$3,951	n/a
<b>10 Mbps</b>	\$1,345	\$1,660	\$7,323	\$2,075
<b>20 Mbps</b>	\$1,842	\$2,876	\$14,477	\$3,217
<b>30 Mbps</b>	\$2,341	\$3,853	\$21,225	\$4,431
<b>40 Mbps</b>	\$2,838	\$4,830	\$27,973	\$4,946
<b>50 Mbps</b>	\$3,336	\$5,806	\$34,720	\$6,122
<b>60 Mbps</b>	\$3,833	\$6,783	n/a	\$7,249
<b>80 Mbps</b>	\$4,830	\$8,737	n/a	\$8,765
<b>100 Mbps</b>	\$5,824	\$10,690	n/a	\$11,581

Type A band: consists of core communities served by fibre transport links (e.g. Whitehorse, Yellowknife).

Type B band: consists of communities connecting to Type A communities using fibre transport links (e.g. Fort Providence).

Type C band: consists of communities connecting to Type A communities by a combination of high-capacity microwave radio and fibre transport links (e.g. Dawson City).

Breakout band: consists of communities outside of Northwestel's operating territory.

### Overview of price cap regime

Northwestel's price cap regulatory framework approved in this decision includes eight baskets: Residential Non-HCSA Services, Residential HCSA Services, Business Services, Other Capped Services, Retail Internet Services, Services with Frozen Rate Treatment, Competitor Services, and Uncapped Services. The framework involves individualized basket constraints, as well as, in some instances, specific rate element constraints.<sup>59</sup>

- The Residential Non-HCSA Services basket includes all residential access services in Whitehorse and Yellowknife. The rates for services in this basket are frozen, except for exogenous events<sup>60</sup> or adjustments required as a result of extraordinary increases to input costs.<sup>61</sup> A rate element constraint of five percent would apply in these circumstances.
- The Residential HCSA Services basket includes all residential access services in Band H1. The basket constraint for this basket is inflation with a rate element constraint of five percent.
- The Business Services basket includes all business access services. An overall constraint of inflation is applied to the basket, with a rate element constraint limiting increases for individual services to 10 percent per year.
- The Other Capped Services basket includes most other retail services (e.g. optional features, digital private line services, and construction charges). An overall constraint of inflation is applied to the basket, with a rate element constraint of 10 percent.
- The Retail Internet Services basket includes all retail Internet services offered in terrestrially served communities. Rates for services in this basket are capped at existing levels pending the outcome of a proceeding to consider the appropriate basket structure and pricing constraints.

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<sup>59</sup> Services are grouped into baskets based on criteria such as homogeneity and/or similarity in demand price elasticities. The overall basket constraint typically determines the allowable annual weighted-average price change for services subject to the price cap; prices for individual services may increase or decrease provided that, in aggregate, they conform to the basket constraint. Sometimes, additional pricing constraints are imposed on services within a particular basket to further limit the magnitude of the telephone company's pricing actions in relation to the price cap index.

<sup>60</sup> Exogenous events or initiatives satisfy the following criteria: (a) they are legislative, judicial, or administrative actions which are beyond the control of the company; (b) they are addressed specifically to the telecommunications industry; and (c) they have a material impact on the company. Adjustments to the price cap for such events are represented by the exogenous factor. Exogenous factor adjustments are not applied to the Competitor Services or Services with Frozen Rate Treatment baskets.

<sup>61</sup> See Telecom Decision 2007-5.

- The Services with Frozen Rate Treatment basket includes those services which address social obligation issues such as privacy, emergency, and special needs. The rates for these services are frozen.
- The Competitor Services basket includes all competitor services such as Wholesale Connect. Proposals for rate changes for these services are considered on a case-by-case basis.
- The remaining retail services are assigned to the Uncapped Services basket. This basket generally includes competitive services (e.g. toll-free service, Centrex), and special assembly services that are developed with a regard to long-term customers' commitments.