Telecom Decision CRTC 2004-5

Ottawa, 27 January 2004

Ethernet services

Reference: 8622-A4-200304957, Bell Canada Tariff Notices 6726, 6726A and 6754, and TELUS Communications Inc. Tariff Notice 65

In this decision, the Commission approves on an interim basis the introduction of Ethernet access service by Bell Canada that would also be available to Canadian carriers registered with the Commission or digital subscriber line service providers (competitors).

The Commission also **approves on an interim basis** the introduction of Ethernet central office (CO) connecting link arrangements (Ethernet CO connecting link service) by Bell Canada for competitor use. The Commission further directs Bell Canada to provide, on an interim basis, an Ethernet interface service for competitor use.

The Commission requires TELUS Communications Inc. to provide, on an interim basis, an Ethernet CO connecting link service for competitor use and to introduce, on an interim basis, an Ethernet interface service for competitor use.

The Commission requires Aliant Telecom Inc. (Aliant Telecom), MTS Communications Inc. (MTS) and Saskatchewan Telecommunications (SaskTel) to introduce, on an interim basis, Ethernet access service that would be available to competitors. The Commission further requires Aliant Telecom, MTS and SaskTel to introduce, on an interim basis, an Ethernet interface service and an Ethernet CO connecting link service for competitor use.

- 1. The Commission received an application by Bell Canada, Tariff Notice (TN) 6726, dated 4 February 2003 and amended on 18 August 2003, in order to introduce item 5020, Ethernet Access, to its General Tariff.
- 2. Bell Canada's proposed Ethernet access service would provide for the transmission of information between an end-user's premises and Bell Canada's serving central office (CO) at speeds of 10/100/1,000 megabits per second (Mbps). This proposed service would be available with, and without, customer premise equipment for the purpose of connecting in the CO to a third party's network.
- 3. Bell Canada indicated that its application was filed pursuant to the Commission's determination in *Regulatory safeguards with respect to incumbent affiliates, bundling by Bell Canada and related matters*, Telecom Decision CRTC 2002-76, 12 December 2002.
- 4. The Commission received a subsequent application by Bell Canada, TN 6754, dated 9 June 2003, to introduce item 122, Ethernet CO Connecting Link Arrangements, to its Access Services Tariff. This service would provide Canadian carriers registered with the Commission and digital subscriber line service providers (DSLSPs) (competitors) with a transmission facility from the carriers' or DSLSPs' co-located CO building space to Bell Canada's patch panels.



- 5. The Commission received an application by TELUS Communications Inc. (TCI), TN 65, dated 27 August 2002, in order to introduce General Tariff item 519, Ethernet Access Service, and item 520, OC-3 Digital Network Access. The Commission approved, on an interim basis, TCI's proposed Ethernet access service in *Provision of Ethernet access service and OC-3 digital network access service*, Telecom Order CRTC 2002-456, 10 December 2002 (Order 2002-456).
- 6. On 15 April 2003, AT&T Canada Corp., now Allstream Corp. (Allstream), filed an application pursuant to Part VII of the *CRTC Telecommunications Rules of Procedure* (Allstream's Part VII application) in which it sought interim and final orders directing Aliant Telecom Inc. (Aliant Telecom), Bell Canada, MTS Communications Inc. (MTS), Saskatchewan Telecommunications (SaskTel) and TCI to file tariffs for various telecommunications services and facilities that Allstream referred to as "next generation" services and facilities. Aliant Telecom, Bell Canada, MTS, SaskTel and TCI are referred to, collectively, as incumbent local exchange carriers (ILECs). Allstream used the term "next generation" services to refer to Ethernet, ADSL/Gateway and Wavelength access services¹.

Background

- 7. In Forbearance granted for telcos' wide area network services, Order CRTC 2000-553, 16 June 2000 (Order 2000-553), the Commission found that, in light of the degree of competition in the wide area network (WAN) market, it was appropriate to forbear pursuant to section 34 of the Telecommunications Act (the Act) from certain sections of the Act in relation to the provision of current and future WAN services offered by all ILECs except SaskTel. Order 2000-553 applies to SaskTel as a result of the Commission's determinations in SaskTel Transition to federal regulation, Decision CRTC 2000-150, 9 May 2000.
- 8. The Commission also found in Order 2000-553 that the services it forbore from did not include asynchronous transport mode (ATM) based carrier interconnection services or ATM services that provided public switched telephone network (PSTN) interconnection or call control capabilities equivalent to interconnection with the PSTN. The Commission noted that the underlying access services were available from the ILECs at tariffed rates and from competitors.
- 9. In Order 2000-553, the Commission retained its powers under section 24 of the Act to ensure that existing conditions regarding disclosure of confidential customer information to third parties continued to apply, and to impose conditions as may be needed in the future. The Commission also determined that, in view of the pervasive position of the ILECs in markets for access and transport, it would retain its powers under subsections 27(2), 27(3) and 27(4) of the Act to ensure that the ILECs would not unjustly discriminate against other service providers or customers, or confer an undue or unreasonable preference with respect to the provision of WAN services.

¹ Ethernet is a packet-based protocol that allows for the networking of multiple devices over a shared network using either coaxial, twisted pair or fibre optic cable. Asymmetric digital subscriber line (ADSL) is a bandwidth technology that converts an existing twisted pair telephone line into a data communications pathway. Wavelength is an optical technology that allows for the provisioning of multiple wavelengths of light over a single fibre optic access facility.

- 10. In *Regulatory framework for second price cap period*, Telecom Decision CRTC 2002-34, 30 May 2002 (Decision 2002-34), the Commission identified ILEC services that were in the nature of an essential service and those developed for use by telecommunications service providers, other than services in the nature of an essential service, and assigned these two types of services to the Competitor Services basket as Category I and II Competitor Services respectively.
- 11. Category I Competitor Services comprises those services that are in the nature of an essential service. With certain exceptions, Category I Competitor Services are priced on the basis of the ILECs' Phase II costs plus a mandated mark-up of 15%. Services in the nature of an essential service generally comprise interconnection and ancillary services required by Canadian carriers and resellers interconnecting to the ILECs' networks, including essential services as defined in *Local competition*, Telecom Decision CRTC 97-8, 1 May 1997 (Decision 97-8), and near-essential services, such as those that were the subject of *Local competition: Sunset clause for near-essential facilities*, Order CRTC 2001-184, 1 March 2001.²
- 12. Category II Competitor Services are services developed for use by telecommunications service providers, other than those services that are in the nature of an essential service. The pricing of Category II Competitor Services is based on the ILECs' Phase II costs and determined on a case-by-case basis.
- 13. In Decision 2002-34, the Commission also directed the ILECs to provide a competitor digital network access (CDNA) service to Canadian carriers and resellers on an interim basis. The interim CDNA service provides Canadian carriers and resellers with an ILEC digital network access (DNA) facility and associated link between the premises of the competitor's end-customer and the ILEC's CO. In Decision 2002-34, the Commission determined that the access component of the CDNA service and the associated link should be made available to Canadian carriers and resellers at Category I Competitor Services rates. This decision recognized that competitors were at a competitive disadvantage relative to ILECs in the absence of such a tariffed service.

The proceeding

- 14. The Commission addressed interrogatories to Bell Canada with respect to TN 6726 on 29 April 2003, which Bell Canada responded to on 9 June 2003 and 13 June 2003. The Commission also addressed interrogatories to TCI with respect to its application on 23 May 2003, which TCI responded to on 11 July 2003.
- 15. By Commission letter dated 25 August 2003, Allstream and parties to Allstream's Part VII application were notified that Allstream's requests for relief pertaining to Ethernet service would be addressed in the proceedings dealing with the applications related to Bell Canada TNs 6726 and 6726A and TCI TN 65. Parties were further advised that the record associated with those parts of Allstream's Part VII application dealing with Ethernet issues would be merged with the record of the proceedings to consider these applications.

² In Decision 97-8, the Commission concluded that to be "essential", a facility, function or service must meet three criteria: it is monopoly controlled; a competitive local exchange carrier (CLEC) requires it as an input to provide services; and a CLEC cannot duplicate it economically or technically.

- 16. The Commission received comments on Bell Canada's and TCI's applications from the following parties: Allstream, Câble-Axion Digitel inc., Call-Net Enterprises Inc. (Call-Net), Mr. François D. Ménard, IStop.com, LondonConnect Inc. (LondonConnect), Managed Network Systems Inc. (MNSi) and Xit télécom. Reply comments were filed by Bell Canada and TCI.
- 17. In the context of Allstream's Part VII application, answers were received from Bell Canada, SaskTel, Aliant Telecom, MTS and TCI. Comments were received by LondonConnect, Call-Net and Société en commandite Télébec. Reply and further comments were received from Allstream, the Companies (Aliant Telecom, Bell Canada, MTS and SaskTel).

Positions of parties

Competitors

- 18. A number of parties, including Allstream, Call-Net, IStop.com and MNSi requested that the Commission direct the ILECs to introduce a competitor Ethernet service. Allstream and Call-Net submitted that this competitor service should include all components of the ILECs' Ethernet services on an unbundled basis, tariffed at Category I Competitor Services rates, to permit competitors to provide an end-to-end Ethernet solution for their customers at speeds of 10/100/1,000 Mbps. Allstream, Call-Net and Mr. François D. Ménard submitted that Bell Canada's proposed Ethernet access service and DNA service were similar.
- 19. In its comments dated 26 September 2003, Allstream further requested that the Commission:
 - (a) direct Bell Canada to file a tariff for its Ethernet access services that it was providing to customers on a non-tariffed basis:
 - (b) direct Bell Canada to unbundle the following network components associated with its Ethernet access services:
 - (i) Ethernet access;
 - (ii) Ethernet interface (port);
 - (iii) intra- and inter-exchange private virtual circuits (PVCs); and
 - (iv) aggregated high-speed service provider interface (AHSSPI)³;
 - (c) require Bell Canada to file a separate tariff for each of the above-mentioned network components at Category I Competitor Services rates;
 - (d) issue similar directives for all other ILECs that offer Ethernet access services on a non-tariffed basis;
 - (e) establish final rates for each of these unbundled elements for Bell Canada and TCI; and

³ The AHSSPI is an ATM interface port that operates according to ATM user network interface (UNI) 3.1 standards.

- (f) grant interim approval to Allstream's proposed retail and unbundled competitor Ethernet service tariffs designed for Bell Canada and TCI.
- 20. Call-Net supported Allstream's request indicating that the Commission should direct Bell Canada and TCI to file an interim tariff based on the cost-based rates for the proposed components in Allstream's comments. Call-Net further requested that the Commission direct the ILECs to cease offering Ethernet local access and transport to end-users until they had complied.
- 21. Allstream and Call-Net submitted that the ILECs' refusal to file tariffs for their Ethernet services was causing competitors significant and irreparable harm. Allstream and Call-Net further submitted that, because the ILECs did not have unbundled Ethernet tariffs for competitor use, the ILECs could offer their retail end-users lower rates than competitors could for the same service, even when the competitor had committed to higher volumes than the ILEC's customer. Allstream submitted that, as a result, competitor market share had eroded due to the loss of existing customers that could migrate easily from legacy services (e.g., frame relay) and because new customers require Ethernet services. Call-Net submitted that competitors found it increasingly difficult to use the interim CDNA service to compete against the ILECs' Ethernet-based retail access and transport services. Call-Net described situations that it argued were examples of losing propective Ethernet customers to Bell Canada and TCI.
- 22. While acknowledging that retail Ethernet service had been forborne, Allstream and Call-Net argued that the Commission had not forborne from the underlying local access and transport facilities in Order 2000-553.
- 23. Call-Net submitted that the Commission's fundamental principle had always been that, even when a retail service was forborne, underlying local access and transport that were under the monopoly or dominant supply of the ILECs should continue to be made available on a non-discriminatory basis in order that retail end-users could exercise their choice of competitive service providers and in order that the ILECs could not unjustly discriminate against competitors in favour of their own retail customers.
- 24. Allstream submitted that Bell Canada's proposed Ethernet CO connecting link service should be recognized as a monopoly-supplied service, as other tariffed link services had been, and therefore should be classified as a Category I Competitor Services. Allstream also stated its preference for TCI's proposed one-time service charge over Bell Canada's proposed monthly recurring rate for this service.
- 25. Call-Net requested that the Commission instruct Bell Canada to modify the clause in its Ethernet access service agreement which stipulated that, at the end of the initial term, the agreement would renew automatically for an additional one-year term at the existing first-year contract rates, unless the agreement was terminated in accordance with the terms of the "automatic" renewal clause. Call-Net submitted that Bell Canada and TCI should remove the automatic renewal provision, and obtain positive consent from customers in order to renew the contract no less than 30 days before expiry, consistent with the Commission's show cause directive in paragraph 565 of Decision 2002-34.

- 26. Xit télécom submitted that Bell Canada would provision its proposed Ethernet access service using dark fibre and further submitted that the economic study filed by Bell Canada in support of TNs 6726 and 6726A failed to impute Bell Canada's dark fibre tariff. Xit télécom requested therefore that the Commission postpone its decision on Bell Canada's proposed Ethernet access service until Bell Canada's proposed dark fibre general tariffs had received interim approval and that these rates should then be used in Bell Canada's imputation test for its proposed Ethernet access service.
- 27. LondonConnect argued that the Commission had forborne from the service proposed by Bell Canada in TN 6726. LondonConnect argued further that its primary concern was the inappropriate broadening of the range of services subject to Category I Competitor Services pricing principles, which would have a negative impact on its wholesale revenues and discourage facilities-based competition. LondonConnect asked that the Commission not grant, without undertaking further process, any of the requested additions to the basket of Category I Competitor Services other than those related to co-location connecting links. LondonConnect submitted that the timing of further process should permit parties to take into account the Commission's final decision in the proceeding begun by *Competitor Digital Network Access service proceeding*, Telecom Public Notice CRTC 2002-4, 9 August 2002 (the CDNA proceeding) in their submissions.

Bell Canada

- 28. Bell Canada submitted that its proposed Ethernet access service was non-essential and was designed to enable its retail customers or competitors to use Ethernet technology to access their own networks for the purpose of provisioning WAN services. Bell Canada disagreed with the competitors' argument at the proposed Ethernet access service was similar to DNA service, on the grounds that Ethernet access service, when combined with a WAN, differed significantly from the dedicated facilities of its DNA service.
- 29. Bell Canada indicated that if a competitor wanted a complete Ethernet service between two or more locations it could use the following alternatives: (a) provide its own access and use its core WAN network; (b) buy the complete Ethernet service (access and core) from Bell Canada; or (c) place an Ethernet switch on the end-user's premises and use DNA or interim CDNA service components to connect to the Ethernet switching equipment. Bell Canada also indicated that a competitor could use a Bell Canada Special Facility Tariff arrangement to provision a specific Ethernet-based service.
- 30. Bell Canada submitted that the proposed Ethernet access service consisted of the access elements it considered should be available at tariffed rates as an implied condition of Order 2000-553. Bell Canada further submitted that the other components Allstream requested were in the nature of a WAN, and not the access to the WAN.
- 31. Bell Canada submitted that its Ethernet access service tariff did not meet the Commission's criteria for an essential service. Specifically, Bell Canada stated that the electronics and routing capability used to provide Ethernet access service were available from a number of major suppliers. Bell Canada argued that the network management services that competitors used to offer services such as Ethernet access service should also be readily available from the competitor itself or from a variety of other service providers. Bell Canada also submitted that

there was ample evidence that competitors had access to many sources of fibre transmission facilities for access and referred to Order 2000-553 in this context. Bell Canada argued that the competitors had not introduced evidence in response to TN 6726A to support a conclusion that the Commission's determinations in Order 2000-553 were no longer correct. Bell Canada further argued that the marketplace for such facilities was served by a range of suppliers, that self-supply was common, and facilities-based providers of optical fibre cables and strands were increasingly prevalent.

- 32. Bell Canada submitted that Allstream and Call-Net were essentially requesting that they be provided with an end-to-end WAN service at Category I Competitor Services rates. Bell Canada further submitted that doing so would be inconsistent with the Commission's conclusion in Order 2000-553 that competitors could obtain the underlying access services from other competitors or from the ILECs at tariffed rates. In this regard, Bell Canada argued that its DNA and interim CDNA services remained the primary tariffed building blocks to provide the access component of a competitor's WAN service.
- 33. Bell Canada submitted that its proposed Ethernet CO connecting link arrangements service should be viewed as an extension of a non-essential Bell Canada retail service offering and therefore should not be categorized as an essential service. Bell Canada also indicated its preference for a recurring rate structure for this service.
- 34. In response to Commission interrogatories, Bell Canada provided cost studies for an Ethernet interface component and an ATM interface component. Bell Canada indicated that its cost estimates were preliminary because several activities were not included.
- 35. With respect to Call-Net's arguments regarding the automatic renewal clause, Bell Canada submitted that the renewal clause did not breach any regulatory requirements.
- 36. With respect to Xit télécom's argument that Bell Canada should use its tariffed rate for dark fibre in its imputation test for its proposed Ethernet access service, Bell Canada submitted that it would not provision its proposed Ethernet access service using its tariffed dark fibre service. Bell Canada argued that Xit télécom's submission that Ethernet access service should not be offered at a rate lower than the rate that would have resulted if dark fibre rates were imputed in respect of the Ethernet access service was based on Xit télécom's position that dark fibre was an essential service. Bell Canada submitted that the Commission has not determined that its dark fibre service is an essential service and that the imputation test it filed in support of its proposed Ethernet access service used methodology approved by the Commission.

TCI

37. In its reply to Allstream's Part VII application, TCI submitted that interconnection with an ILEC or another carrier for the purpose of reaching the PSTN was not required for most of the services referred to by Allstream as next generation services. TCI stated that Ethernet service could be provided through appropriate combinations of hardware and network facilities or services. TCI submitted that these facilities or services were readily available from competing equipment suppliers, could be self-supplied, or could be obtained at market rates from carriers (e.g., pursuant to ILEC tariffs, including the interim CDNA service), from CLECs and from other non-dominant network providers such as cable companies and electric utilities.

- 38. With respect to Allstream's requests for additional network components, TCI submitted that it could only provide the CO co-location connecting link service. TCI submitted further that an intra-exchange Ethernet channel service and an inter-exchange Ethernet channel service did not exist in a WAN environment and, therefore, could not be offered. TCI also submitted that the requests made by Allstream and Call-Net were requests to review and vary Order 2000-553.
- 39. TCI submitted that if a competitor did not wish to co-locate in a particular exchange it could purchase an intra-exchange or inter-exchange private line service to backhaul traffic for connection with TCI's DNA service. TCI further submitted that if a competitor wished to concentrate its traffic it could purchase TCI's forborne WAN service.

Aliant Telecom, MTS and SaskTel

40. In reply to Allstream's Part VII application, Aliant Telecom, MTS and SaskTel supported Bell Canada's position opposing proposals by Allstream and Call-Net for an ILEC-provided Ethernet service for competitor use.

Commission analysis and determinations

Bell Canada's Ethernet access service

- 41. The Commission did not receive comments on the use by retail customers of the Ethernet access service proposed by Bell Canada in TNs 6726 and 6726A. The Commission notes Xit télécom's submission that Bell Canada should have used its tariffed rate, once approved, for dark fibre service in its imputation test for its proposed Ethernet access service. However, the Commission notes that, while it proposed to provision its Ethernet access service using fibre cable, Bell Canada would also use media converters to support connectivity on that fibre facility in order to provide and maintain the basic level of network management and maintenance. The Commission considers that the cost study filed by Bell Canada in support of its imputation test for its proposed Ethernet access service is consistent with the approach taken in respect of the imputation tests filed in support of other approved Bell Canada tariffs.
- 42. With respect to Allstream's and Call-Net's requests that Bell Canada's Ethernet access service be made available for competitor use at Category I Competitor Services rates, the Commission does not consider that the current record support such a finding.
- 43. Accordingly, the Commission **approves on an interim basis** and effective the date of this decision, Bell Canada's application under TNs 6726 and 6726A to introduce retail Ethernet access service.
- 44. With respect to Call-Net's submission regarding automatic contract renewal, in *Follow-up to Decision 2002-34 Automatic renewal of contracts with a minimum contract period*, Telecom Decision CRTC 2003-85, 22 December 2003, the Commission set out procedures regarding contract renewal provisions for customers of Bell Canada and TCI with minimum contract periods. Consistent with that determination, the Commission finds that this determination applies to contracts entered into by Bell Canada and TCI with customers, including competitors of Ethernet access service.

Ethernet services for competitor use on an interim basis

- 45. The Commission notes that it did not grant forbearance in Order 2000-553 with respect to the underlying ILEC network elements that competitors may use to provision a WAN service in conjunction with their own facilities. In that order the Commission also retained powers under the Act to ensure that the ILECs would not engage in unjustly discriminatory or unduly preferential treatment of competitors.
- 46. Allstream and Call-Net argued that the current regulatory situation compromised their ability to offer a competitive Ethernet service. Bell Canada and TCI argued, on the other hand, that they should not be required to provide Ethernet services at Category I Competitor Services rates, and that competitors have alternatives available to them.
- 47. The Commission notes that TCI did not file reply comments in response to the competitors' 26 September 2003 comments, which included Allstream's and Call-Net's proposal that TCI provide Ethernet service for competitor use and Allstream's suggested tariffs for that service.
- 48. The Commission notes that LondonConnect requested an opportunity to address interrogatories and to submit comment and reply on the issues after the Commission's final decision in the CDNA proceeding. The Commission agrees with LondonConnect in this regard and therefore does not anticipate that it will be in a position to make final determinations on issues raised by the Ethernet service applications under consideration in this decision until the CDNA proceeding is concluded.
- 49. The Commission notes that Ethernet service is a relatively recent addition to the ILECs' service offerings and considers that Ethernet service is also an important addition to the service offerings of many competitors. Until the Commission reaches its determinations regarding the adequacy of Ethernet substitutes and related matters, the Commission finds it appropriate to put in place interim Ethernet services for competitor use to provide competitors with the opportunity to mitigate any harmful effects they may experience during the remainder of this proceeding.
- 50. Accordingly, the Commission considers below what measures should be adopted on an interim basis.

Interim Ethernet approach for Bell Canada

Bell Canada's approach

51. Bell Canada submitted that a competitor could use the access component of Bell Canada's DNA service or interim CDNA service to create its own Ethernet access. Allstream and Call-Net argued that, given technological and cost differences between Ethernet and these services, using the DNA or interim CDNA services as substitutes for Ethernet access would be increasingly ineffective in the marketplace. The Commission notes that the tariffed rates for the DNA and interim CDNA services are based on costs associated with additional equipment used to provide bandwidth management functionality that is not required to provision a dedicated Ethernet access service to a customer. Further, the speeds at which the access components of

- Bell Canada's DNA and interim CDNA services are available (e.g., DS-0, DS-1, DS-3, OC-3 and OC-12 speeds) do not correspond to the Ethernet access speeds of 10/100/1,000 Mbps. Accordingly, the Commission considers at this time that the access components of the DNA and interim CDNA services do not represent appropriate substitutes for Ethernet access.
- 52. Bell Canada stated that a competitor must be co-located to obtain Bell Canada's proposed Ethernet access service. In TN 6754, Bell Canada proposed to introduce an Ethernet CO connecting link service that would provide a connection between the competitor's co-located space in the CO and Bell Canada's Ethernet access service. The Commission notes, however, that competitors are not co-located in all Bell Canada or other ILEC COs. The Commission further notes that a competitor's decision to co-locate in a given ILEC CO involves numerous considerations, including the associated start-up and ongoing co-location charges. While the Commission's approach to facilities-based competition anticipates that competitors will co-locate, the Commission considers that a non-located competitor should also be able to use Bell Canada's Ethernet access service to provide Ethernet services.
- 53. Accordingly, the Commission does not consider it appropriate at this time to adopt Bell Canada's approach as described above. Instead, the Commission determines, on an interim basis, that it would be appropriate to adopt an approach that makes facilities available to competitors, whether they are co-located or not.

Ethernet CO connecting link service

- 54. As set out above, the Ethernet CO connecting link service proposed by Bell Canada in TN 6754 would permit co-located competitors to use Bell Canada's Ethernet access service in conjunction with non-ILEC facilities. Accordingly, the Commission **approves on an interim basis**, effective the date of this decision, Bell Canada's application to introduce an Ethernet CO connecting link service, as modified below.
- 55. Bell Canada submitted that this service would be an extension of its Ethernet access service which Bell Canada considered to be a non-essential service. Bell Canada therefore proposed retail rates for its proposed Ethernet CO connecting link service. By contrast, competitors requested that the Commission classify Bell Canada's Ethernet CO connecting link service as a Category I Competitor Services.
- 56. The Commission considers that, because only Bell Canada can supply the Ethernet CO connecting link service, the service is subject to the same restricted supply conditions as other ILEC CO link services. The Commission classifies, on an interim basis, Bell Canada's Ethernet CO connecting link service as a Category I Competitor Services.
- 57. Bell Canada proposed recurring rates for this Ethernet CO connecting link service for each of the transmission speeds of 10/100/1,000 Mbps. The Commission notes that in *Optical links arrangements*, Telecom Order CRTC 2003-450, 7 November 2003, it approved, on an interim basis, a one-time service charge rate structure for Bell Canada's optical link service at OC-3 and OC-12 speeds. The Commission considers that it would be appropriate to adopt a similar rating approach on an interim basis in respect of Bell Canada's proposed Ethernet CO connecting link service. The one-time service charge rates that are approved on an interim basis for Bell Canada's Ethernet CO connecting link service are set out in the Attachment to this decision. These rates are based on the company's cost estimates provided in TN 6754 plus a 15% mark-up.

Ethernet interface service for competitor use

- 58. The Commission notes that a competitor that is not co-located in a Bell Canada CO would require two interfaces supplied by Bell Canada in order to provide its own Ethernet service: an Ethernet interface and an ATM interface. In response to a Commission interrogatory associated with TN 6726, Bell Canada provided cost studies and proposed rates for an Ethernet interface component available at transmission speeds of 10/100/1,000 Mbps. This interface component would connect an Ethernet access circuit to Bell Canada's Ethernet switching equipment, located in the CO. In response to the same interrogatory, Bell Canada provided cost studies and proposed rates for an ATM interface component that would provide transmission facilities at OC-3 and OC-12 speeds from Bell Canada's Ethernet switching equipment for connection with DNA facilities, located in the serving wire centre.
- 59. The Commission determines that Bell Canada is to provide, on an interim basis and effective the date of this decision, an Ethernet interface service for competitor use that contains an Ethernet interface component supporting transmission speeds of 10/100/1,000 Mbps and an ATM interface component supporting transmission speeds of OC-3 and OC-12.
- 60. A competitor that is co-located in a Bell Canada CO would not need an Ethernet interface and an ATM interface to provide Ethernet service. Accordingly, the Commission classifies, on an interim basis, both components of Bell Canada's Ethernet interface service as Category II Competitor Services. The interim rates approved by the Commission for Bell Canada's Ethernet interface component and the ATM interface component, which include the associated links ⁴, are set out in the Attachment to this decision. These rates are based on the company's cost estimates and reflect margins comparable to those proposed by Bell Canada for its Ethernet access service.
- 61. The Commission confirms that a competitor may use each component of the Ethernet interface service in conjunction with other ILEC-provided services, on an interim basis, whether or not it is co-located in the Bell Canada CO in question.

Competitors' request for Ethernet transport services

- 62. A competitor that is co-located will typically self-supply its transport facilities. A competitor that is not co-located will generally require an ILEC's transport facility between the ILEC's CO and the competitor's point of presence or CO. Allstream requested that PVCs and associated AHSSPIs be included as components of an interim Ethernet service for competitor use.
- 63. The Commission notes that competitors have alternatives to Bell Canada's PVCs and may extend their networks to additional Bell Canada COs using these alternatives. These alternatives include self-supplied facilities, third-party-supplied facilities and tariffed ILEC transport facilities (e.g., DNA services). The Commission considers that these alternatives are appropriate substitutes, on an interim basis, for Bell Canada's PVCs. In this decision, the Commission requires Bell Canada to provide, on an interim basis, an ATM interface component that will permit multiple Ethernet accesses to be aggregated onto the access or intra-exchange components

⁴ These links provide three types of connection: the connection between Bell Canada's fibre management system and the ATM interface component; the connection between Bell Canada's fibre patch panel and the Ethernet interface component; or the connection between Bell Canada's category 5 patch panel and the Ethernet interface component.

- of Bell Canada's retail DNA service at OC-3 or OC-12 transmission speeds. The Commission therefore notes that the ATM interface component would permit a competitor to aggregate traffic from multiple Ethernet accesses and to transport that traffic using a single DNA facility.
- 64. Accordingly, the Commission does not find it appropriate to make the ILECs' PVCs and the associated AHSSPIs available on an interim basis as a Competitor Service.

Interim Ethernet approach for other ILECs

- 65. The Commission notes that Allstream's 26 September 2003 comments and Part VII application requested relief in respect of all ILECs. In many Commission decisions regarding facilities-based competition (e.g., Decision 97-8 and Decision 2002-34 with respect to the introduction of the interim CDNA service), the Commission adopted a regulatory framework that applied to all ILECs, taking any significant differences in their circumstances into account, as appropriate.
- 66. Accordingly, the Commission considers that the regulatory approach it approves in this decision with respect to the Ethernet service in Bell Canada's serving territory should apply in the serving territories of the other ILECs, taking into account, as appropriate, cost differences and any significant differences in circumstances among these ILECs.

TCI

- 67. The Commission approved TCI's Ethernet access service, which includes a link component, on an interim basis in *Provision of Ethernet access service and OC-3 digital network access service*, Telecom Order CRTC 2002-456, 10 December 2002. Consistent with its determinations above, the Commission requires TCI to provide, on an interim basis and effective the date of this decision, an Ethernet CO connecting link service for use by competitors that are co-located in the serving wire centre and that lease TCI's Ethernet access service. The Commission classifies TCI's Ethernet CO connecting link service, on an interim basis, as a Category I Competitor Services. The interim rates approved by the Commission for this service are set out in the Attachment to this decision. These rates are based on the company's proposed rates provided in response to Commission interrogatories related to TN 65.
- 68. With respect to an Ethernet interface service, TCI submitted in response to Commission interrogatories requesting cost studies for an Ethernet interface component and an ATM interface component that these interfaces did not exist and could not be offered in a WAN environment. On this basis, TCI did not file the cost studies requested. However, the Commission notes that Bell Canada can provide these facilities and considers that TCI did not demonstrate that it cannot provide an Ethernet interface service to competitors.
- 69. Accordingly, the Commission requires TCI to introduce, on an interim basis, an Ethernet interface service that contains an Ethernet interface component and an ATM interface component for use by competitors, whether or not they are co-located in the CO in question. The Commission classifies, on an interim basis, the Ethernet interface service as a Category II Competitor Services.

Aliant Telecom, MTS and SaskTel

- 70. Allstream's Part VII application requested that the Commission direct each ILEC, including Aliant Telecom, MTS and SaskTel to:
 - (a) file tariffs for Ethernet access service for inclusion in each ILEC's General Tariffs;
 - (b) file tariffs for a competitor Ethernet service, including the unbundled network components and services that form part of the ILEC's Ethernet service; and
 - (c) determine competitor Ethernet service rates reflecting Category I Competitor Services pricing principles.
- 71. The Commission notes that Aliant Telecom currently offers Ethernet access and link services under its Data Network Services General Tariff. However, MTS and SaskTel do not provide an Ethernet service pursuant to a General Tariff. Having regard to the importance of underlying access services being available to competitors from the ILECs at tariffed rates, and consistent with the approach adopted for competitors operating in the serving territories of Bell Canada and TCI, the Commission determines that Aliant Telecom, MTS and SaskTel are to provide, on an interim basis, an Ethernet access service that would be available to competitors at the retail rates approved for Bell Canada's Ethernet access service or company-specific proposed rates supported by cost studies.
- 72. Consistent with the approach adopted for Bell Canada and TCI, the Commission further determines that Aliant Telecom, MTS and SaskTel are to provide, on an interim basis (a) an Ethernet CO connecting link service for competitor use and (b) an Ethernet interface service, containing an Ethernet interface component and an ATM interface component, for competitor use whether or not the competitor is co-located in the CO in question. The Commission classifies, on an interim basis, the Ethernet CO connecting link service as a Category I Competitor Services and classifies, on an interim basis, the Ethernet interface service as a Category II Competitor Services.

Other matters

Accounting

73. The Commission requires the ILECs to retain records from the date of this decision with respect to all Ethernet services used by a competitor to permit an accounting adjustment to be made if the Commission determines this would be appropriate.

Use of ILEC Ethernet services

74. The Commission confirms that, on an interim basis, competitors may use components of the Ethernet services to which this decision relates in conjunction with other ILEC services or service components or with any service they self supply or acquire from a third party.

Directions

- 75. The Commission directs Bell Canada to issue tariff pages, within 10 days from the date of this decision, that reflect the Commission's determinations in this decision with respect to Ethernet access service as proposed in TN 6726A, an Ethernet CO connecting link service and an Ethernet interface service. The Commission directs TCI to issue tariff pages, within 10 days from the date of this decision, which reflect the Commission's determinations in this decision with respect to an Ethernet CO connecting link service.
- 76. The Commission directs Bell Canada to file, within 45 days from the date of this decision, complete revised cost studies, in support of the Ethernet interface component and the ATM interface component of the Ethernet interface service, as described in this decision.
- 77. Bell Canada is further directed to file updated cost studies within 60 days from the date of this decision for the Ethernet access service and the Ethernet CO connecting link service approved in this decision. The cost studies are to be provided by Rate Bands A to G and for each of the transmission speeds 10/100/1,000 Mbps.
- 78. The Commission directs TCI to file updated cost studies within 60 days from the date of this decision for its interim Ethernet access service, which includes the link component, consistent with the cost studies provided in the response to Commission interrogatory TCI(CRTC)24Oct02-7 associated with TN65. The Ethernet access cost studies are to be provided by Rate Bands A to G for each of TCI-Alberta and TCI-BC and for each of the transmissions speeds of 10/100/1,000 Mbps. The Commission further directs TCI to file updated cost studies within 60 days from the date of this decision for an Ethernet CO connecting link service, as described in this decision.
- 79. The Commission further directs TCI to indicate, within 10 days from the date of this decision, whether it will adopt the interim rates approved for Bell Canada's Ethernet interface service containing an Ethernet interface component and an ATM interface component or, in the alternative, will file proposed rates and supporting cost studies for its Ethernet interface service. All cost studies and proposed rates are to be filed within 30 days from the date of this decision. If TCI chooses to adopt Bell Canada's interim Ethernet interface service rates, TCI is to issue tariff pages for this service within 20 days of the date of this decision.
- 80. The Commission directs each of Aliant Telecom, MTS and SaskTel to indicate, within 10 days from the date of this decision, whether it will adopt the interim rates approved in this decision for Bell Canada's Ethernet access service, Ethernet CO connecting link service and Ethernet interface service or, in the alternative, will file proposed rates and supporting cost studies for its Ethernet access service, Ethernet CO connecting link service and Ethernet interface service. All cost studies and proposed rates are to be filed within 45 days from the date of this decision. If a company chooses to adopt Bell Canada's interim Ethernet interface service rates, it is to issue tariff pages for this service within 20 days of the date of this decision. The Commission notes that, consistent with the approach taken in respect of Bell Canada and TCI, it prefers a flat rate structure for Ethernet access service and a one-time service charge rate for Ethernet CO connecting link service. The Ethernet access cost studies are to be provided by Rate Bands A to G for each of the transmissions speeds of 10/100/1,000 Mbps.

- 81. With respect to the cost studies provided by the ILECs, the Commission directs that the study period is to cover the period 1 January 2004 to 31 December 2008 and that the cost studies are: to be expressed in year 2004 dollars; to be based on the latest set of economic parameters; and to be consistent with the Commission's 14 July 2003 letter concerning Phase II costing information requirements.
- 82. Aliant Telecom, Bell Canada, MTS, SaskTel and TCI are to serve their proposed rates, proposed tariff pages, an abridged copy of their cost studies and any other submissions on all persons that made submissions with respect to Allstream's Part VII application or with respect to the tariff notices that are the subject of this decision. Documents must be received, not merely sent, by the deadlines indicated.

Secretary General

This document is available in alternative format upon request and may also be examined at the following Internet site: http://www.crtc.gc.ca

Interim rates for Bell Canada's Ethernet services for competitor use

Ethernet CO connecting link service

	10 Mbps	100 Mbps	1,000 Mbps
All bands (one-time charge)	\$2,588.37	\$2,588.37	\$2,414.93

Ethernet interface component of Ethernet interface service

	10 Mbps	100 Mbps	1,000 Mbps
All bands	\$31.55/month	\$31.55/month	\$217.41/month
Service charge	N/A	N/A	N/A

ATM interface component of Ethernet interface service

	OC-3	OC-12	
All Bands	\$658.01/month	\$1,226.02/month	
Service charge	N/A	N/A	

Interim rates for TCI's Ethernet CO connecting link service

Ethernet CO connecting link service

	10 Mbps	100 Mbps	1,000 Mbps
All bands (one-time charge)	\$1,000.00	\$1,000.00	\$4,000.00