

**PETITION TO HER EXCELLENCY  
THE GOVERNOR IN COUNCIL  
By MTS Allstream Inc.  
In the matter of  
Telecom Decision CRTC 2008-118  
and  
Telecom Regulatory Policy CRTC 2009-34**

**Reply Comments  
of  
Bell Canada Regional Communications, Limited Partnership  
and  
Bell Canada**

**May 4, 2009**

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## 1.0 INTRODUCTION

1. These Reply Comments are filed by Bell Aliant Regional Communications, Limited Partnership and Bell Canada (collectively, the Companies) and pursuant to the procedure laid out in the 4 April 2009 Canada Gazette, Part I with respect to Notice No. DGTP-004-09, Petitions to the Governor in Council concerning Telecom Decisions CRTC 2008-117 and CRTC 2008-118, Telecom Regulatory Policy CRTC 2009-34, and Telecom Order CRTC 2009-111. In support of these reply comments, the Companies are also filing three complementary reports:

- Appendix 1, Mark H. Goldberg & Associates Inc., *Stimulating Broadband Investment – Continuing a policy framework for Canadian telecom*, 4 May 2009;
- Appendix 2, William E. Taylor, *Declaration of William E. Taylor*, 4 May 2009; and
- Appendix 3, *Impact on incentives to invest from mandated access to Incumbent Carriers' networks at reduced rates*, 4 May 2009.

2. While the Companies agree with MTS Allstream Inc. (MTS Allstream) that broadband access is a key enabler of productivity, and that competition for broadband access benefits Canada domestically and internationally, the Companies fundamentally disagree that mandated access to Ethernet and aggregated asymmetric digital subscriber line (ADSL) services, especially at lower cost-based rates, will foster competition and bolster Canada's productivity. As will be demonstrated below, MTS Allstream's petition for regulatory support must be rejected for two key reasons. First, within the telecom sector, MTS Allstream's request, wrapped in the guise of an appeal for greater competition, is really designed to ensure continued competitor reliance on the investment of others; it would protect certain competitors rather than promote competition. Second, at the greater macroeconomic level, MTS Allstream's mandated access proposal would be a recipe for disaster in terms of encouraging investment and innovation, and thus would ultimately weaken Canada's productivity.

3. MTS Allstream's claim of 21,000 lost jobs and \$6 billion in lost GDP is based on the conclusions of its U.S. expert, which are completely unsound. The claim is predicated on the hypothetical negative economic impact of allegedly "excessive" prices for certain wholesale telecommunications inputs, prices which the Federal Communications Commission (the U.S. equivalent to the Commission) has explicitly reviewed and found not to be "excessive". In addition, MTS Allstream's expert misinterprets the results of inputting these "excessive" prices into an economic model to estimate their economic impact. Furthermore, given the structural differences between the Canadian and U.S. economies (Canada being a small, open, exporting country and the U.S. being a large, closed, importing country), it is highly speculative to

extrapolate the U.S. experience into Canada. Any attempt to extrapolate a faulty U.S. number into Canada must be rejected outright.

4. Government policy should protect competition and not competitors. This is a harsh truth that may not sit well with parties advocating continued regulated access without any changes to their business plans. Succumbing to requests for perhaps convenient, but not essential access to competitor facilities, would amount to establishing a wholesale services regulatory regime that supports individual competitors, or classes of competitors, rather than providing incentives that promote the development of sustainable facilities-based competition. Survival is not a right due any party despite a failure or inability to make the investments needed to remain a viable supplier.

5. Moreover, distorting the competitive process by creating low-priced digital network access tariffs, as MTS Allstream requests, would inhibit the investment (by incumbents and competitors alike) of fibre optic facilities.

6. MTS Allstream's petition aims to facilitate access to its competitors' Ethernet and ADSL infrastructure. Before we examine the merits of MTS Allstream's request, it would be useful to recall what the two telecommunications services under review are, and in particular to keep in mind that a fundamental distinction must be made between fibre and copper-based services. Generally, higher data speeds are provided over fibre.

7. ADSL services are used, broadly speaking, by competitors to provide retail high-speed Internet access services to end-users over the incumbent telephone provider's data network. The "aggregated" nature of this service refers to the fact that Internet data from different end-users within a given service area (typically a wire centre) is consolidated (and therefore transported over the backbone network) before being sent to the competitor's point of interconnection to this network. The ILECs' ADSL services are, most commonly, provided over copper connections and typically at speeds below 10 Mbit/s. ADSL services are primarily used to service residential end-users but can also satisfy the data needs of small and medium-sized businesses (SMBs).<sup>1</sup>

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<sup>1</sup> Bell Canada's data shows that 75% of its ADSL accesses are used by competitors to service residential customers. See footnote 4.

8. Ethernet is a high-speed data service (10, 100 or even 1,000 Mbit/sec), comprised of both an access component (to the customer's premises) and a transport component (moving the data across the provider's backbone network between cities, provinces or even further), the latter of which is provided over fibre optics.

9. The infrastructure choice of the access component of Ethernet is driven by the broadband speed desired by the customer. Lower speed Ethernet, in a fashion similar to ADSL, may be offered over copper facilities and is of prime interest to customers with limited data requirements, such as most SMBs. Higher speed Ethernet services are delivered over fibre accesses and are only of interest to large data users, such as certain big businesses or institutional customers. Higher speed Ethernet is not appropriate for most medium-sized businesses, and is unsuitable for small business or residential customers.<sup>2</sup> For ease of presentation, and to emphasize its key characteristic, higher speed Ethernet access will be referred to in these reply comments as Fibre Ethernet.

10. With respect to the transport component of Ethernet, transport services have by and large already been duplicated and, where they have not, competitors are prepared to build. The evidence in the Essential Facilities proceeding overwhelmingly showed that numerous competitors have build backbone networks of regional or national scope. For instance, Bell Canada, TELUS, Rogers,<sup>3</sup> Primus<sup>4</sup> and Shaw<sup>5</sup> all operate their own national fibre backbone networks across Canada. Ontario utelcos collaborate to provide a network which covers the vast majority of Ontario's population.<sup>6</sup> Competitors have already built, or are prepared to build, transport facilities, largely due to the high revenue potential of the many and varied existing and reasonably foreseeable retail services which utilize these facilities.

11. During this same Essential Facilities proceeding, MTS Allstream described its own national transport network, stating that its "...extensive national fibre optic network spans more than 24,300 kilometres"<sup>7</sup> and that MTS Allstream has fibre connections in all of the major

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<sup>2</sup> Appendix 2 of the MTS Allstream petition indicates for instance, at page 11, that only 3% of buildings would demand data speeds of 45 MBps or higher. This is consistent with Bell Canada's experience.

<sup>3</sup> Rogers' 15 March 2007 Evidence, paragraphs 122 to 124.

<sup>4</sup> 30 October 2007 Transcript, paragraph 16766.

<sup>5</sup> See Lemay-Yates description of Shaw's network at pages 28 and 29, from its 2008 Annual Report.

<sup>6</sup> See for instance the fibre network maps of Hydro One and Atria Networks, respectively, at [http://www.hydroonetelecom.com/network/network\\_map.html](http://www.hydroonetelecom.com/network/network_map.html), and [http://www.atrianetworks.com/fibre\\_optic\\_network.php](http://www.atrianetworks.com/fibre_optic_network.php).

<sup>7</sup> 26 October 2007 Transcript, paragraphs 13208 to 13217, and page 10 of the Attachment to MTS Allstream(The Companies)19Jul07-38.

Canadian cities. MTS Allstream's petition itself (at paragraph 22) mentions that MTS Allstream has already invested heavily in transport facilities, including Ethernet transport, and operates an updated national backbone network.

12. Despite the abundance of competitor investment, including its own, MTS Allstream has the audacity to request that Ethernet transport remain mandated in perpetuity, at a discount, and be unbundled from its access component. This request is entirely unfounded. There are no policy grounds justifying a variation of the Commission's decision to progressively de-regulate Ethernet transport.

13. Fibre Ethernet, a fibre solution for big business, and lower speed services such as ADSL and low-speed Ethernet, which are copper-based and largely residential or SMB services, are very different from each other, though MTS Allstream's petition lumps them together and seeks similar relief, i.e. mandated access at lower, cost-based rates, for both types. The MTS Allstream petition hardly provides, however, any arguments to support its ADSL remedy. For instance, its expert appendices on the U.K. and U.S. experience both focus, as their respective titles clearly indicate, on Ethernet, not ADSL. Similarly, the Lemay-Yates Appendix discusses next-generation services (like Fibre Ethernet, but not ADSL) while distinguishing the business sector from the admittedly competitive residential sector. Yet this distinction is fundamental when the evidence shows that aggregated ADSL is primarily a wholesale residential service. Bell Canada disclosed in 2007 that approximately 75% of its demand for wholesale ADSL services (known in the industry as Gateway Access Services and High-Speed Access) related to residential users.<sup>8</sup> The MTS Allstream petition does not even identify the error that the Commission allegedly made by denying MTS Allstream's previous request to lower the price of ADSL, simply stating that the Commission "recognized that MTS Allstream and competitors have long expressed a need"<sup>9</sup> for lower prices. Competitor wishes are not arguments.

14. The Companies will thus focus these reply comments on MTS Allstream's request for cost-based mandated access to Ethernet, a request made on the basis of allegedly insufficient competition in the business sphere, and the presumably innocuous consequences on investment if such access were mandated. The Companies disagree with these two factual assumptions made by MTS Allstream. In any event, these factual allegations, even if they were

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<sup>8</sup> Paragraph 94 of Appendix 6 of Evidence submitted by Bell Canada and others on 15 March 2007 as part of the record of the proceeding leading to Decision 2008-17 (a difference which is known to Bell Canada because there is a different price for business and residential end-users).

<sup>9</sup> MTS Allstream Petition, page 15.

true, would not justify the requested relief (in particular with respect to ADSL or low-speed Ethernet). The Companies agree with MTS Allstream's implicit admission that there is vigorous competition for residential and small businesses, notably from the cable companies' extensive network,<sup>10</sup> and therefore fails to see how MTS Allstream's ADSL (and low-speed Ethernet) relief may be justified.

## **2.0 FIBRE ETHERNET IS COMPETITIVE**

15. MTS Allstream's essential premise is expressed at paragraph 4 of its petition:

Only government action [i.e. mandated access] will ensure that Canadian businesses of all sizes have competitive alternatives necessary to fill their business-critical telecommunications needs and thereby meet the challenge of ensuring Canada's economic success.

16. The Companies wholeheartedly agree that competition brings benefits to Canadian businesses, thereby fostering Canada's economic success. However government action is not necessary to ensure or sustain this outcome. Competition already exists, independent of regulation. Moreover, competitors are able to invest and further participate in the delivery of next-generation telecommunications services.

17. As indicated earlier, the circumstances of "Canadian businesses of all sizes" cannot be examined without separating these businesses on the basis of the kinds of telecommunications services they require. Lower bandwidth requirements, provided for instance over copper facilities, are typically suitable for SMB customers (as well as residential ones). Overwhelmingly, SMB customers can choose between at least two facilities-based competitors for their telecommunications services: the incumbent telephone and cable companies. In addition, SMBs may turn to facilities-based competitors who complement their own infrastructure by using the incumbents' wholesale mandated access options such as line sharing, unbundled loops and low-speed digital access services (all of which the Commission has mandated the ILECs to provide to MTS Allstream and similar competitors at costs-based rates). It is also important to note that none of these low bandwidth wholesale services have been set on a path to de-regulation; their continued availability to competitors is not at stake in this petition (except for MTS Allstream's request that the price of ADSL be lowered).

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<sup>10</sup> In the proceeding leading to CRTC Decision 2008-17, Bell Canada presented a comprehensive analysis showing that 95% of SMBs in Ontario and Québec were located within the footprint of at least one cable company.

18. Lower bandwidth services can also be provided over wireless networks, a growing alternative technology with three national facilities-based providers, a variety of smaller regional or local players,<sup>11</sup> and upcoming entrants following the recent AWS spectrum. As Mr. Goldberg concludes in his report *Stimulating Broadband Investment – Continuing a policy framework for Canadian telecom* (Appendix 1 to these Reply Comments), there are a number of connectivity options available for small and medium sized businesses, or smaller branch offices of large enterprises.<sup>12</sup>

19. Higher bandwidth services are provided primarily to large businesses and institutional customers. These services are also provided over fibre rather than copper facilities. As a result of this technological difference, the telephone and cable companies do not have an incumbency advantage derived from their legacy network. The telephone and cable companies have had to invest in, and deploy, fibre to connect big business premises. Other entities, like utilities and out-of-territory competitors such as MTS Allstream and TELUS (in Ontario and Québec) or Bell Canada (in the West) have similarly been able to make necessary investments in fibre access, over which Ethernet services may be provided. All these entities compete today to provide high-speed data services to these lucrative big customers.

20. Fibre Ethernet is provided in a very competitive market. MTS Allstream's arguments to the contrary are flawed in a number of respects. First, MTS Allstream tries to minimize the presence of competitors providing fibre-based solutions by diluting their access into the premises of interested big data users across the sea of all business premises, including home-offices and mini-malls which have no use for these fibre services. Second, competitors have multiple alternatives to offer Fibre Ethernet services, not the least of which is self-supply as evidence shows that fibre deployment by competitors is not only possible but is taking place. Data on competitor investment in fibre facilities confirms the Commission's findings that Fibre Ethernet is duplicable, and thus should not be subject to continued mandated access.

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<sup>11</sup> For instance, in Toronto, Cogeco's "One Zone Wireless network" launched in 2006 and provides a total of six square kilometres of WiFi coverage in Toronto's downtown core, see <http://www.onezone.ca> for more details. TeraGo Networks offers high-speed wireless Internet at speeds ranging from 1.5 Mbps to over 100 Mbps, see <http://www.terago.ca/business-high-speed-internet.html> for more details. Other wireless providers also include Sogetel in Quebec and Zing Networks in Ontario who have begun deploying WiMAX based solutions to areas underserved by DSL or cable high-speed Internet services.

<sup>12</sup> See discussion on page 27 of Appendix 1.



## 2.1 Presence of Fibre Competition

21. MTS Allstream alleges that the cable companies and utility companies are not vigorous competitors for Ethernet. The performance of these competitors clearly shows otherwise, as can be seen in detail in section 5 of the Goldberg Report. A few salient counter-examples of MTS Allstream's claim are highlighted here.

22. While it may be true that certain cable companies are not currently focussing on the big business segment, it is an overstatement to write them out of the market.<sup>13</sup> Rogers, Canada's largest cable company, certainly can and does offer fibre data services, as evidenced by its successful bid to offer 100 Mb and above to the York Region District School Board. MTS Allstream conveniently limits its description of Cogeco, the fourth largest cable operator in Canada, to its role as the new owner of Toronto Hydro Telecom. Cogeco Data Services nevertheless operates the largest Wi-Fi network in North America and connects over 500 buildings with its own fibre in the GTA.<sup>14</sup> Cogeco Data Services also discloses on its website that it is in the midst of doubling its network coverage and the number of buildings connected to it within the next 30 months, in flagrant contradiction to Lemay-Yates' suggestion that Cogeco's growth has stagnated.<sup>15</sup> MTS Allstream also notes that Videotron's telecom branch (an affiliate then a division separate from Quebecor's cable operations) has recently experienced declining revenues, as evidence that it cannot or does not compete in the Ethernet sphere. Videotron would appear to disagree since its corporate website promotes its readiness to offer next-generation services for businesses, including using Ethernet technology.<sup>16</sup>

23. MTS Allstream also fails to point out that, in the wholesale proceeding,<sup>17</sup> Videotron indicated that its investment strategy had been stunted instead by a Commission reduction of the rates of the ILEC's CDN services (a digital access service for data), thereby undermining Videotron's telecom business case. Videotron's experience (and that of other providers) in this

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<sup>13</sup> The Companies also point to the competitive presence of Eastlink Data Communications, Atlantic Canada's leading cable operator, whose website indicates that Fibre Ethernet services are available in several Eastern Canada provinces, see <http://www.eastlink.ca/business/data/index.asp> for details.

<sup>14</sup> [http://www.cogecodata.com/about\\_us/index.php?utm\\_source=home\\_&utm\\_medium=global%2Bnav\\_&utm\\_campaign=about%2Bus](http://www.cogecodata.com/about_us/index.php?utm_source=home_&utm_medium=global%2Bnav_&utm_campaign=about%2Bus)

<sup>15</sup> Lemay Yates Report, page 35.

<sup>16</sup> <http://www.vtl.ca/en/solution.asp>

<sup>17</sup> Evidence of Quebecor Media Inc., 15 March 2007, at paragraph 57, in response to Telecom Public Notice 2006-14, *Review of regulatory framework for wholesale services and definition of essential service*: "CDN service prices were set at a level which severely undermined the ability of Videotron and other competitors to compete in the market and greatly decreased the incentive for new entrants to build competing facilities.."

regard will be detailed further below, as an illustration of how mandated access, especially at low prices, can be a disincentive to competitor investment.

24. With respect to utelcos, it is true that several of them have changed hands recently, but that in no way implies that they have ceased to operate. For example, Atria Networks has consolidated a number of separate operations (such as Telecom Ottawa in 2008) and thus now "owns and operates one of Ontario's largest fibre-optic networks".<sup>18</sup> MTS Allstream's comments incorrectly imply that once a utelco is purchased, its fibre assets simply disappear from the market, rather than remain available to its acquirer. In any event, no matter which competitors are gaining and which ones are waning, the evidence shows that when counted correctly, the competitors' aggregate market presence is quite significant.

25. Out-of-territory ILECs, such as MTS Allstream outside of Manitoba, also provide competition for fibre-based services like high-speed Ethernet. TELUS has constructed a fibre optic network in Toronto and invested at least of \$15.9B in Ontario and Québec since 2000.<sup>19</sup>

26. MTS Allstream provides misleading data on the market impact of competitors. Most egregiously, it mistakenly uses, as a denominator of market share or market presence, the total number of businesses in a given area, regardless of their size and data needs. For instance, MTS Allstream brushes off Telecom Ottawa (now Atria) because it only serves 1% of Ottawa's "more than 29,000 businesses".<sup>20</sup> This is ludicrous, as MTS Allstream includes as part of the overall market a host of business premises, such as hair salons or pizza parlours, that don't have the slightest interest in Telecom Ottawa's suite of services. Similarly, MTS Allstream highlights that Cogeco/Toronto Hydro's network only covers 1% of Toronto's total commercial buildings, concluding that thus "the task of providing alternate fibre optic access to all business locations in Toronto"<sup>21</sup> is daunting. It is absurd to believe that all business locations have to be connected with fibre in order for Ethernet competition to exist.

27. MTS Allstream's Telecom Ottawa example, among others, also biases the results by only counting the buildings where a given competitor currently provides service to a customer, therefore neglecting to count the buildings that a competitor has already connected to its

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<sup>18</sup> As described on Atria Networks' website at <http://www.atrianetworks.com/about.php>.

<sup>19</sup> TELUS Community Board releases of April 2008 and TELUS press release of 11 May 1999.

<sup>20</sup> MTS Allstream Petition, Appendix by Lemay-Yates, page 32. Lemay-Yates also appears to rely on 2001 data (200 buildings) whereas 2008 data indicates instead that Telecom Ottawa then connects 950 buildings as shown in TelecomOttawa(Cogeco)12Apr07-1 PN2006-14 (proceeding leading to Decision 2008-17).

<sup>21</sup> Ibid., page 35.

network (not to mention those that competitors could connect readily) but where the customer does not currently subscribe to the competitor. Current service is not as important to a picture of competition as a comprehensive count of all the competitors able to provide service to a customer.

28. When the denominator is more sensibly set to contain only business premises where customers are, or could reasonably be, interested in fibre-provided data services, the importance of competitors substantially increases and clearly reveals that this market is competitive.

29. Bell Canada's data, showing competitor investment in fibre and their successful marketing of fibre-based services like Ethernet, is corroborated by the data submitted by the competitors themselves to the Commission. At a high level, the Commission's 2008 Monitoring Report reveals that competitors (including out of territory ILECs like MTS Allstream) accounted for a 49% share of the revenues associated with new high-speed services, which include Ethernet, in 2007, a gain of 6% from the year before. In more detail, the Commission has conducted two recent proceedings where it looked closely at the fibre deployment and offerings of competitors.

30. In the proceeding initiated by Telecom Public Notice CRTC 2005-8, *Framework for forbearance from regulation of high-speed intra-exchange digital services*, the Commission examined the factors necessary to establish the competitiveness of retail high-speed intra-exchange digital services (DNA services). These high-speed services are, like Ethernet, typically provided over fibre and, as such, the Commission's findings in respect of high-speed DNA facilities are instructive for Ethernet.<sup>22</sup> The Commission's reasoning, summarized below, is also informative in casting the problem correctly:

...there must be sufficient evidence that competitors have addressed, and can address, barriers to entry and expansion before forbearance is warranted.

[...]

The Commission finds merit in a test that relies on competitor high-speed DNA-capable network presence to determine whether forbearance is appropriate. The Commission considers that, with respect to high-speed DNA services, a test that relies on competitor network presence within a wire centre is a better indicator of the state of competition than market share. The Commission considers that

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<sup>22</sup> While the two types of services are provided over a similar infrastructure, they differ in terms of service functionalities in that DNA services are dedicated accesses with guaranteed speeds while Ethernet is a shared service with best-effort speed.

market share information provides a historic view of competition in the relevant market. In contrast, a test that relies on competitor market presence reflects competitors' current and potential ability to respond to ILEC activity in the relevant market using facilities supplied by an alternative source.

However, the Commission considers that the mere existence of very limited competitor network presence (e.g. the provision of one high-speed DNA service in a wire centre) is insufficient to demonstrate sustainable competition...

[...]

"The Commission therefore considers that, in order for forbearance to be appropriate, the competitors should be able to independently and reasonably offer customers an alternative to ILECs' high-speed DNA services over their own facilities; that is, competitors should own and operate the underlying transmission facilities.

In the Commission's view, an effective and efficient way to measure independently provided competitor network presence in a wire centre is to identify the number of buildings connected to competitors' high-speed DNA-capable networks within a wire centre. The Commission considers that this number is an appropriate indicator of the strength of competition in a market now and in the future, including the ability of competitors to overcome barriers to entry and expansion.

The Commission considers that, in arriving at the appropriate competitor network presence criterion, it is not necessary to ensure competitive supply parity with the ILEC, i.e., to ensure that competitors are present in as many buildings as the ILEC. Rather, the Commission is of the view that it is sufficient to ensure that there is, and will be, sustained competition in the forborne market.

The Commission considers that forbearance would be unduly delayed if it were only granted when competitors have network presence parity with the ILECs. Conversely, the Commission considers that forbearance would be premature if it were granted where competitors do not have any network presence. In the Commission's view, competitor network presence should provide an appropriate balance between competitive supply parity and situations where competitors have no high-speed DNA-capable facilities. The Commission considers that a competitor network presence of 30 percent would provide a proper balance. "

31. Applying this approach, and after analyzing the data that competitors provided on the number of buildings they were connected to with fibre, the Commission found that competitors had achieved at least 30% penetration in locations that represent 57% of Bell Canada's total high-speed DNA services. This means that 57% of Bell Canada's high-speed DNA business was contestable by competitors who had already built their own facilities. Another 26% of Bell Canada's high-speed DNA business was in locations where competitors had achieved at least 20%, but not quite 30%, penetration. Overall, therefore, competitors had built fibre to compete where more than 80% of Bell Canada's fibre-based DNA customers are located.

32. Examining only those buildings which have demand for fibre-based services provides a much more telling picture of the reality of competition than what MTS Allstream wishes to portray. For example, MTS Allstream (through Lemay Yates, at page 35), asserts that only 1% of Toronto's commercial buildings are connected to Toronto Hydro's network, thereby suggesting that competition is virtually non-existent. This is misleading. Bell Canada itself has only built fibre to a very small portion of those 51,000 buildings as well (as it generally only builds fibre to big buildings serving large enterprises), but that does not mean that it can't offer services to Toronto's big businesses. In fact, the Commission, in undertaking a building by building analysis, has found that 71% of the fibre private line services Bell Canada sells in Toronto are in areas where competitors have built fibre to at least 30% of all the buildings (the number increases to 93% if we include areas where the Commission determined competitors have built fibre to at least 20% of all the buildings). Even on a conservative basis, therefore, MTS Allstream's doomsday figure of 1% rises to over 70% when the relevant set of Toronto customers is examined. It is clear that when one correctly looks at customers serviced by fibre, the competitors' investment in fibre and presence is much stronger than MTS Allstream describes.

33. The Commission also looked at competitor investment in fibre in the course of its Essential Facilities proceeding. In particular, the Commission asked each participant to identify, for each customer, whether they were servicing the location themselves, over facilities leased from an incumbent, or from a third party. Based on this industry data, provided by the competitors themselves, the Commission determined that "the record indicates a high incidence of competitor self-supply or alternative supply of fibre-based access and transport facilities."<sup>23</sup> Obviously, this Commission finding that Fibre Ethernet, like other high-speed fibre-based services, can be offered by competitors without reliance on incumbents clearly shows that the ILEC's network can be replicated.

34. MTS Allstream, directly<sup>24</sup> and in the Lemay Yates report, attack this Commission conclusion on the basis that the Commission's information request to competitors, asking for a breakdown between accesses that were self-supplied, obtained from an ILEC, or obtained from a third-party, failed to elicit the relevant evidence upon which to decide that Fibre Ethernet could be phased out from regulation. The Companies disagree. The key question is whether

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<sup>23</sup> Paragraph 118 of Decision 2008-17.

<sup>24</sup> See paragraphs 57 and following of the MTS Allstream petition.

competitors are able to provide services to big customers without relying on the incumbents' access fibre. The Commission correctly asked industry players whose facilities they used to deliver services to customers. Importantly, at the time the Commission asked its question (as is the case today), Fibre Ethernet was available in the market at mandated tariffed rates. Therefore, competitors had the choice between regulated Fibre Ethernet and independent supply. Nevertheless, the competitors' answers indicated that a substantial proportion of their fibre optic accesses were being provided by parties other than the incumbent. As Mark Goldberg points out<sup>25</sup>:

[t]he CRTC had been able to establish using two different statistical analyses the degree to which competitors can self-supply their own facilities or make use of alternative suppliers, precisely the criteria for ruling that the fibre facilities are non-essential.

35. It was thus not an error for the Commission to set Fibre Ethernet services on a path to progressive de-regulation.

36. The facts show that there are competitors that have been able to build alternative fibre networks in many cities, with a presence that is comparable to that of the telephone companies. It is therefore impossible to conclude that it is "not practical or feasible for competitors to duplicate the functionality" of Fibre Ethernet. Fibre Ethernet is not an essential facility warranting regulation; efficient competitors can and do build Fibre Ethernet infrastructure and compete vigorously with incumbents for customers.

## **2.2 Alternatives to Fibre Ethernet Self-Supply**

37. But even if certain competitors were unable to self-supply Fibre Ethernet today, this would not at all mean that they do not have alternatives with which to service large customers. Competitors can utilize substitute technologies (such as certain unbundled loops and DNA services<sup>26</sup>) available either on a forborne basis (from third parties and in some cases by ILECs) or at tariffed rates from ILECs. The regulatory regime applicable to these substitute technologies is not under review in the MTS Allstream Petition (or the Companies' or TELUS' petitions).

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<sup>25</sup> Page 44 of Appendix 1.

<sup>26</sup> During cross-examination in the Essential Facilities proceeding, MTS Allstream acknowledged that DNA can be used to provide Ethernet, see 26 October 2007 Transcript, paragraphs 13424 to 13426.

38. Even with respect to the narrow provision of Fibre Ethernet, competitors lacking the requisite investments have two alternatives today. First, these competitors seeking Fibre Ethernet can enter into commercial agreements with non-ILEC third parties who, themselves, have made the requisite investment. Second, competitors can still obtain Fibre Ethernet access from incumbents, at mandated tariffed rates, until February 2013.<sup>27</sup> This phase-out period was established by the Commission in Decision 2008-17 and was intended to provide competitors with sufficient time for business planning, expanding their network and making commercial arrangements. Parties such as MTS Allstream still have nearly four years to sever their dependence on the ILEC's Fibre Ethernet. MTS Allstream's petition is therefore, in addition to its numerous flaws, premature.

39. In addition, even at the expiry of the phase-out period, MTS Allstream and competitors will still be able to rely on the ILECs' Fibre Ethernet. An often repeated myth advanced by competitors is that once mandated ILEC wholesale services have been forborne from regulation, these services will be withdrawn. Nothing could be further from reality.

40. There exists a healthy multi-million dollar annual wholesale business in Canada today, as MTS Allstream well knows from its purchases of forborne wholesale services from the ILECs, which the ILECs have demonstrated they are more than willing to satisfy.

41. Vertically-integrated carriers have the incentive to sell wholesale services once a competitor builds facilities. During the Essential Facilities proceeding, MTS Allstream notably confirmed that 55% of its wholesale revenues came from non-mandated wholesale services.<sup>28</sup> Bell Canada indicated in its testimony during this same proceeding that close to 40% of its wholesale revenues consist of forborne services.<sup>29</sup> The data provided in the Commission's 2007 Monitoring Report show a similar picture. The Canadian telecommunications market generated \$3.3 billion in wholesale revenue for service providers in 2006. By deducting from this amount all of the reported revenues for services that are mandated, it is apparent that in 2006 more than \$2.3 billion<sup>30</sup> in wholesale revenues were from retail tariffed and forborne services supplied on a competitive basis.

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<sup>27</sup> This phase out period is also applicable to high-speed wholesale DNA services, which may be substituted for Fibre Ethernet,

<sup>28</sup> 26 October 2007 Transcript, paragraphs 13976 to 13977.

<sup>29</sup> 10 October 2007 Transcript, paragraph 3347.

<sup>30</sup> This is total wholesale revenue in Table 4.1.1 less interconnection and unbundled loop revenue in Table 4.2.10, Internet Access revenue in Table 4.4.1, Ethernet revenue in Table 4.5.3 and Short Haul Private Line revenue in Table 4.5.5. Obviously some of the Internet Access, Ethernet and Short Haul Private Line revenues are for competitive rather than mandated services so this is a conservative statement.

### **2.3 Conclusion on Fibre Ethernet Competition**

42. In light of the presence of competition for Fibre Ethernet today, the fact that competitors can and do self-supply the requisite infrastructure to provide Fibre Ethernet, the continued mandated access of Fibre Ethernet over the next few years, and the availability of alternative technologies, there is no doubt that access to Fibre Ethernet services does not need to be further facilitated by government.

43. The Commission, informed by the evidence gathered in two different proceedings (both the high-speed retail DNA and the wholesale Essential Facilities decisions), correctly decided to slowly phase out the regulation of Fibre Ethernet services over the next few years. The Commission's careful approach to Fibre Ethernet regulation provides competitors with ample time to re-organize their business away from any dependence on tariffed access and towards self-supply, commercially negotiated contracts or some mixture of both. Competition exists today and will continue to flourish.

44. The Commission's approach is aligned with the Governor-in-Council's Policy Direction, which requires that the Commission:

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.

45. In contrast, MTS Allstream's proposed remedy is unsupported by the industry evidence and flies in the face of the Policy Direction, favouring perpetual mandated access, and at a discount, over reliance on sufficient market forces.

46. Of course, competitors are free to adopt different business models with regard to investment in their networks. MTS Allstream has elected to invest mostly in its backbone transport network as opposed to building access facilities. In contrast, other competitors have elected to favour self-supply of access facilities. If MTS Allstream's model proves to be an unfortunate choice in light of the growing competition from facilities-based and its associated de-regulation, then it still has until 2013 to re-orient its business towards either investment in access facilities or commercially-negotiated leasing of third parties (or ILEC) facilities. In fact, beyond any argument that government policy should not favour competitors over competition, government intervention reversing the Commission's careful path to de-regulation of Fibre



Ethernet would undermine investment and innovation. Contrary to MTS Allstream's assertions, mandated access is not innocuous; it entails significant costs to society. These costs are addressed in detail in the next section of these reply comments.

47. However, before turning to the question of investment incentives, we briefly address two specific issues raised by MTS Allstream in support of its arguments, though neither relates to Fibre Ethernet.

#### **2.4 PWGSC/DND Dispute and AWS Auction**

48. First, MTS Allstream points to a recent dispute between the Government of Canada and Bell Canada with respect to the delivery of telecommunications services to the Department of National Defence (DND) as evidence of large businesses having few competitive alternatives. This characterization fails when the events behind the dispute are put in context.

49. In 2007, following a competitive bidding process initiated by Public Works and Government Services Canada (PWGSC) and that involved bids by a number of service providers, TELUS was awarded telecommunications business required by the DND. PWGSC's award required that this competing provider complete a migration of services from Bell Canada to its network within a period of 12 months. PWGSC thus expected that 12 months would prove sufficient to effect the migration. TELUS, and other providers, indicated in their bid submission that they would satisfy this condition and none objected to the 12-month timeframe.

50. At the same time, PWGSC requested of Bell Canada that it amend its applicable tariffed contract to introduce a series of 18 one-month extensions, at the customer's option. Bell Canada complied and obtained Commission approval for this modification. Bell Canada did not impose on PWGSC a short migration timeline; on the contrary Bell Canada accepted PWGSC's request for an extension of their arrangement for the time of the expected duration of the migration, plus a six month buffer. Bell Canada has been quite accommodating of PWGSC's needs and migration horizon.

51. It is well-known that TELUS missed the 12-month migration deadline, as well as subsequent migration commitments, and that it could not provide the required services to PWGSC by the time the last Bell Canada extension expired, none of which were Fibre Ethernet services. Bell Canada had repeatedly warned PWGSC of TELUS' poor migration planning and

slow progress, but PWGSC did not seek alternative supply from Bell Canada for services to be provided after the 18 one-month extensions (or from other suppliers as far as Bell Canada is aware) until well after the migration difficulties should have been obvious. PWGSC's difficulties were not due to a lack of competitive options, but rather from TELUS' failure to fulfill its contractual obligations to PWGSC as well as the last minute attempts by PWGSC to solve its predicament. This matter has since been resolved by virtue of a Commission ruling.

52. Second, MTS Allstream points to the AWS Auction framework as an "example of an astute policy decision that enhanced investment and competition"<sup>31</sup> because it shows that Government recognized that "reliance on market forces would be insufficient to stimulate market entry".<sup>32</sup> Without analyzing the substantive merits of this wireless policy, the Companies note MTS Allstream admits that, in its view, the policy was adopted because market forces were insufficient to stimulate market entry (which is not necessarily the same as being insufficient to advance the telecom objectives). It follows that the AWS auction policy illustrates that where market forces are sufficient, as the Companies have demonstrated is the case for Fibre Ethernet, a policy decision to enhance competition and investment is unnecessary. If, and only if, market forces are insufficient, the decision to implement a particular regulatory policy to encourage competition must factor the risk that this very policy simultaneously undermines investment and productivity.

53. Moreover, it is important to note that the wireless auction framework represented the Government's policy for managing spectrum, a scarce public resource. The MTS Allstream petition instead seeks to appropriate by government fiat access to a network built by private enterprise with, in large respect, private funds. MTS Allstream's request for forceful government intervention in property rights is all the more misplaced considering that the Commission has already found that building these networks can be done by MTS Allstream and other competitors. MTS Allstream is thus really asking for a regulatory advantage over those competitors who have used their own resources to invest.

### **3.0 NEGATIVE IMPACT OF MANDATED ACCESS ON INVESTMENT AND INNOVATION**

54. MTS Allstream argues that "varying the ADSL and Ethernet Decision to mandate competitors' access to DSL and Ethernet facilities at reasonable, ... cost-based rates, will enable

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<sup>31</sup> MTS Allstream petition, paragraph 5.

<sup>32</sup> Ibid.

economic growth, ensure that the former monopolies compete on a fair basis for market share with other providers, and keep prices competitive for businesses of all sizes,"<sup>33</sup> and that "contrary to the predictable arguments of the large incumbents, granting access by competitors to their networks on reasonable terms and conditions will not limit the incentives of competitors or themselves to invest."<sup>34</sup>

55. While the Companies wholeheartedly agree with MTS Allstream that broadband access is a key enabler of productivity, and that competition for broadband access benefits Canada both domestically and internationally, the Companies fundamentally disagree that mandated access to Ethernet and aggregated ADSL services, especially at lower cost-based rates, is necessary to foster competition and bolster Canada's productivity. MTS Allstream's mandated access proposal would be a recipe for disaster in terms of encouraging investment and innovation, and thus would ultimately weaken Canada's productivity.

56. Competition is widely acknowledged to deliver the greatest benefits – in terms of innovation, network efficiency and investment – when competitors have the opportunity and incentive to build their own facilities. For example, the Telecommunications Policy Review Panel (TPR Panel) concluded that "...the most effective method for promoting these incentives [for innovation, network efficiency and investment] is to ensure that competitive market forces apply to the broadest possible range of network and service components in as many locations as economically feasible."<sup>35</sup> The TPR Panel recognized that "...new entrants should have both opportunities and incentives to build their own" and that "[s]ince by definition retail market entry is not possible without competitor access to essential facilities, the regulatory framework should continue to require incumbents to make these available, on a mandatory basis if necessary", but concluded that "...given the current state of competition in Canada, continuing to require that incumbents make non-essential facilities available to competitors undermines the incentives for the latter to build alternative facilities. This in turn undermines competitive market incentives for all service providers to be efficient, to innovate and to invest".<sup>36</sup>

57. Moreover, in the context of wholesale regulation, the Government's Policy Direction<sup>37</sup> requires the Commission to create a regime for wholesale services which increases "...

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<sup>33</sup> MTS Allstream petition, paragraph 37.

<sup>34</sup> MTS Allstream petition, paragraph 99.

<sup>35</sup> TPR Panel Final Report, page 3-33.

<sup>36</sup> TPR Panel Final Report, page 3-33.

<sup>37</sup> C. Gaz. 2006.II.2344.

incentives for innovation and investment in and construction of competing telecommunications network facilities." Particularly important for the issue at hand, is that regulation which focuses on the protection of individual competitors has been widely discredited through the work of the TPR Panel<sup>38</sup> and the issuance of the Policy Direction.<sup>39</sup> In this regard, the TPR Panel concluded that the scope of wholesale access prior to the Commission's Essential Facilities proceeding, was too broad and that it undermined incentives for competitive entry, investment and innovation. The TPR Panel stated that, while the Commission "...has identified facilities-based competition as an objective of its regulatory framework it has adopted mandated wholesale access policies that, in the Panel's view, seriously undermine, if not foreclose, the achievement of that objective".<sup>40</sup> The Policy Direction recognizes that "...greater reliance on market forces will allow for greater realization of the benefits of free markets – increased competition and productivity, which in turn has the ability to produce benefits for consumers and businesses alike through greater innovation and investment." A regime targeted at end-to-end facilities-based competition<sup>41</sup> provides better incentives for efficiency and innovation in the design, construction and operation of networks, than a regime which provides access to a wide range of mandated wholesale services.

58. In order to achieve end-to-end facilities-based competition, MTS Allstream subscribes to the "stepping-stone" theory of investment which argues that entrants require extensive mandated access when they first enter because entry by building facilities is expensive.<sup>42</sup> As their customer base grows and cash flow turns positive, entrants will gradually build their own facilities and replace leased network elements. Thus, mandated access to many facilities should be considered temporary, or a "stepping-stone" to full facilities-based investment.

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<sup>38</sup> Telecommunications Policy Review Panel, *Final Report*, section 3.

<sup>39</sup> As well as by the Competition Bureau, the Competition Tribunal and most other anti-trust authorities. For example, see Canadian Competition Bureau, *Enforcement Guidelines on the Abuse of Dominance Provisions* (for example, part 1.3), Canada (Director of Investigation and Research) v. The D & B companies of Canada Ltd [1995] 64 C.P.R. (3d) 216 (Comp. Tribunal), and *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209 (1993).

<sup>40</sup> TPR Panel Final Report, page 3-35.

<sup>41</sup> In these Reply Comments, the Companies use the term "end-to-end facilities-based competition" to refer to competition between at least two telecommunications carriers deploying their own infrastructure directly connecting customer premises. It is distinguished from competition between the incumbent and competitors, where competitors are deploying their own DSL access multiplexers and other similar infrastructure but are also utilizing unbundled local loops or other wholesale access supplied by the incumbent. A given competitor can be an end-to-end facilities-based competitor in one market and use unbundled local loops or other wholesale access in another market. There are no competitors in Canada – including the ILECs – who are end-to-end facilities-based competitors in each and every relevant market.

<sup>42</sup> MTS Allstream petition, paragraph 23.

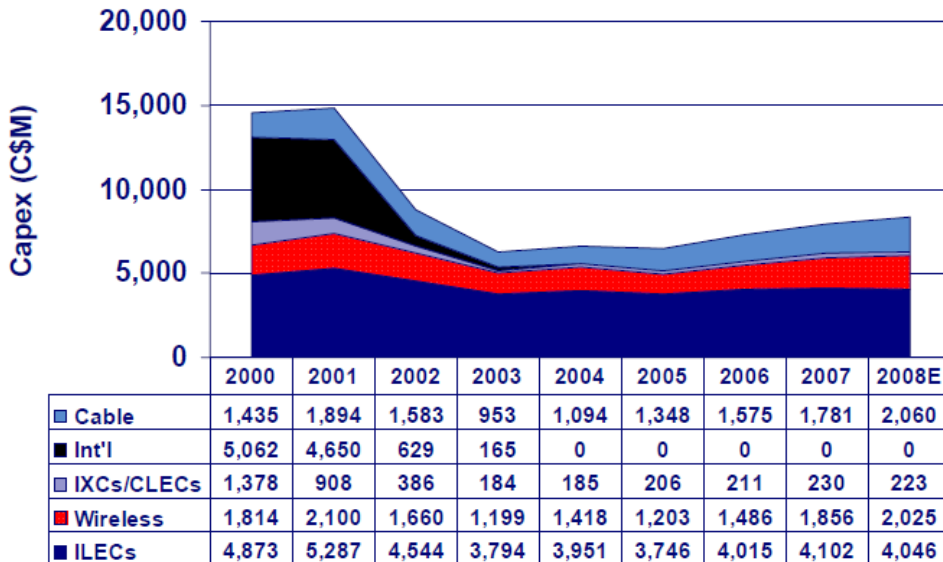
59. However, as the Competition Bureau argued in the Commission's Essential Facilities proceeding, the experience in Canada suggests that this theory has not worked:

Competitors have been given ten years to bridge the stepping-stones to facilities-based competition. If the Commission were to now stop mandating access to loops, with a phase-out or transition period of five years, that would amount in total to fifteen years for competitors to have climbed the ladder of investment in Canada. Extending what was meant to be a temporary state of affairs even longer must certainly call the basis of the theory into question. ... Indeed, there is considerable evidence that a wide scope of mandated access, at low regulated prices, has had the opposite effect to that postulated by the stepping stone theory.<sup>43</sup>

60. The lack of CLEC investment is shown in an IDC Report titled *Vendor Needs and Strategies: Canadian Telecommunications Capex Budgets 2007-2008*. Figure 1 shows that capital expenditures by non-cable CLECs have decreased since 2001. It is the cable companies – which do not require access to ILEC facilities – that are the driving force of CLEC investment in Canada.

Figure 1

Canadian Telecom Capex by Segment, Including Cable, 2000-2008 (C\$M)



Source: IDC Canada, 2008

<sup>43</sup> *Argument of the Commissioner of Competition*, in Public Notice CRTC 2006-14, Review of regulatory framework for wholesale services and definition of essential service, paragraph 60.

61. While mandated access has not increased CLEC investment, it has affected the incentives to invest by ILECs. Economist Dr. William E. Taylor, in *Declaration of William E. Taylor* (Appendix 2 to these reply comments), notes that for economists the relationship between mandatory unbundling and infrastructure investment is straightforward:

On the one hand, mandatory unbundling could, in theory, encourage competition where competition would not otherwise take hold, leading to additional investment from ILECs and CLECs as a consequence. On the other hand, mandatory sharing of facilities would immediately reduce the payoff to both ILECs and CLECs from infrastructure investment.<sup>44</sup> Many studies have examined this tradeoff empirically. While ETI offers only a simplistic coincidence in time to link deregulation and reduced investment, other, more detailed studies come to the opposite conclusion — that reducing unbundling requirements increases infrastructure investment.<sup>45</sup>

62. The decrease in the incentive to invest is due to the reduced returns that an ILEC can expect to earn. As argued by Dr. Taylor:

Investments in new fiber infrastructure are large, sunk and subject to risk from changes in the market and in technology. Mandatory unbundling provides competitors with a free option to use the platform at the ILEC's cost, which reduces the possible returns an ILEC can expect to earn. Thus, it is not surprising that ILEC investment decisions regarding FiOS and U-verse were premised on regulatory expectations.<sup>46</sup>

63. The Commission's policies have harmed incentives to invest and have led to reductions in actual levels of investment and construction of network facilities. This reduction in investment due to mandated access is not just an academic argument. The TPR Panel's conclusions are exemplified by the impacts on investment decision after the Commission's Competitor Digital Network (CDN) services decisions mandating access to the ILECs' digital network access, transport and channelization services at reduced rates. As discussed in more detail in *Impact on incentives to invest from mandated access to Incumbent Carriers' networks of reduced rates* (Appendix 3 to these reply comments), some examples of decreased investment as a result of the Commission's CDN decisions include:

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<sup>44</sup> For ILECs, revenue from services that require new infrastructure would be less under mandatory unbundling, particularly where prices of unbundled facilities fail to account for the option value of using new network facilities that require investment that is risky and sunk. For CLECs, month-to-month leasing of new facilities at rates that do not fully account for risk is more profitable than sinking investment in their own facilities.

<sup>45</sup> Appendix 3, paragraph 42.

<sup>46</sup> Appendix 3, paragraph 38.

- Bell Canada's western Canadian operations ("Bell West") re-evaluated construction decisions and determined that the construction of certain facilities was no longer the least-cost alternative. Bell West's annual access capital allocation budgets for building these types of services have been reduced by more than 50% from 2004 to 2007.
- TELUS has stated that it adjusted its business plans to rely on the facilities of Bell Canada in Ontario and Québec to a greater extent than it would otherwise have done in the absence of the Commission's unbundling policies.
- Quebecor Media Inc. (QMI) described the impact of the CDN Decision on Videotron (VTL) stating: "Carrier customers, now that they may purchase an extensive range of access and transport services from the ILECs at minimal mark-up over ILEC costs, have little or no incentive to enter into strategic provisioning arrangements with alternative wholesalers like VTL". QMI went on to state that "[t]he financial harm to VTL has been swift and dramatic. Numerous wholesale customers, taking advantage of renewal provisions or benchmarking clauses in their service contracts, have renegotiated down their monthly payments to VTL". In QMI's view "...the Commission jettisoned its facilities-based competitive philosophy when it created the CDN regime".

64. Despite the existence of the Policy Direction, MTS Allstream continues to argue that the Commission should err on the side of over-mandating access because in its view the risk of harm from regulating when it is not necessary (i.e. the harm from regulation) is low, whereas the risk of harm from not regulating when it is necessary (i.e. the harm from not regulating) is high. The Companies strongly disagree. As the examples above indicate, over-mandating access has a clear negative impact on the incentives to invest in telecommunications infrastructure.

65. Moreover, the Competition Bureau in the Commission's Essential Facilities proceeding, emphasized the importance of innovation at the network level, warned the Commission to be sceptical of claims that investment in facilities is a by-product of mandated access, and explained that some duplication of networks is inevitable as service providers strive to lower costs:

In an industry as dynamic as telecommunications, innovation is perhaps the strongest force driving increased customer benefits. While consumers benefit from both innovations at the network and facilities layer and at the services and applications layer, historically, the most meaningful innovations for consumers have taken place in the network. The change from analog to digital technologies;

the introduction and continued development of mobile services; the ongoing shift from circuit-switched to packet-switched networks; and the deployment of optical fibre ever closer to the customer premise are examples of network layer innovation that have already fundamentally changed the telecommunications industry, or are currently changing it, for the betterment of consumers.

...

[C]laims by parties to this proceeding that the empirical evidence on the record proves that increased investment in facilities is a by-product of mandated access should be viewed with extreme scepticism. Indeed, in the Bureau's opinion, the preponderance of the empirical record and the evidence of experts adduced at the hearing suggest the opposite conclusion, namely, that mandated access slows investment in facilities.

...

In the Bureau's view, this argument [that increased investment in facilities is a by-product of mandated access] reflects a profound misunderstanding of the role of investment under conditions of competition. In particular, while competition does lead to some duplication, this is one avenue for new entrants to achieve lower costs (process innovation) and to come up with new services and functionalities (product innovation). If competitors are given incentives not to invest in a particular class of assets, such as the access network, then a range of innovations will be artificially foreclosed, or at least delayed.<sup>47</sup> (footnotes omitted)

66. MTS Allstream and their experts argue that broadband facilities are essential and that European and U.S. experiences show that without mandatory access at reasonable rates there will be less investment, less competition for telecommunications services, higher retail prices and harm from the overall economy. In particular, to defend this assertion, MTS Allstream claims that in the U.S. since deregulation of access in 2001 there has been a decline in investment<sup>48</sup>, that the U.K. is a European example of how regulation increases investment<sup>49</sup>, that Canada has begun to fall behind its international counterparts with respect to broadband penetration<sup>50</sup>, and that deregulation in the U.S. has resulted in higher special access prices resulting in lower GDP and lost jobs.<sup>51</sup> As discussed below, each of these claims is without merit.

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<sup>47</sup> *Argument of the Commissioner of Competition*, in Public Notice CRTC 2006-14, Review of regulatory framework for wholesale services and definition of essential service, paragraphs 21, 45 and 53.

<sup>48</sup> MTS Allstream petition, paragraph 77.

<sup>49</sup> *Ibid.*, paragraphs 76 and 99.

<sup>50</sup> *Ibid.*, paragraph 95.

<sup>51</sup> *Ibid.*, paragraph 81.



67. MTS Allstream states that the deregulatory policies adopted by the U.S. in 2001, was the cause of the decline in telecommunications infrastructure investment. However, Dr. Taylor shows that the deregulatory policies were not the cause of the decline in investment:

[T]he dramatic reduction in telecom investment after 2001 was — as even ETI concedes — a result of the dot-com debacle, not a change in US regulatory philosophy. Moreover, a simple timeline shows that the deregulatory actions that ETI cites could not have caused the telecom meltdown because they occurred or were implemented long after 2001 when telecom investment fell. On the contrary, ETI's own figures show a sharp *increase* in telecom investment after mandatory unbundling of broadband access and local switching were eliminated, from which many analysts have reached the opposite conclusion from ETI — that removing unbundling obligations stimulated telecom investment in the US. ... Once UNE-P and broadband unbundling were no longer mandatory, US ILECs and CLECs did not scale back their total investment outlays. Rather, their *total* capital expenditures increased sharply and they initiated investment on the order of \$5 billion per year in next-generation FTTH/N networks.<sup>52</sup>

68. MTS Allstream's' experts Economics and Technology Inc. (ETI) then assert that the differences in investment patterns of CLECs and ILECs between Canada and the U.S. were caused by differences in the regulatory regimes of the two countries. Consistent with the investment patterns shown above, Dr. Taylor shows that CLEC investment in both Canada and the U.S. is being driven by cable companies and not by differences in regulatory policy:

The striking increase in Canadian CLEC investment in *RoR* Figure 6 is due entirely to investment by Canadian cable Broadcast Distribution Undertakings (BDUs) — carriers that do not make use of the incumbents' last-mile facilities. If we remove capital expenditures by cable BDUs attributable to wireline telephony from the CLEC data in Figure 6, we find that capital expenditures by non-cable CLECs have decreased since 2001 rather than increasing sharply as shown in *RoR* Figure 6. See Figure 13.

...

Worse, the comparison in Figure 6 between Canadian and US CLEC capital expenditures is incorrect: while the Canadian CLEC figure includes cable companies, the US CLEC capital expenditure series apparently does not. ETI does not tell us which US CLECs are included in its Figures 5 and 6. If the CLECs listed in *RoR* Table 6 are also the CLECs included in Figures 5 and 6, that list does not include the large cable companies active in telephony such as Comcast (the third-largest US telephone company) , Cablevision, Cox and Charter. Moreover, capital expenditures by these cable companies could not have been included in *RoR* Figure 5 because the sum of the capital expenditures of Comcast, Cablevision, Cox and Charter by themselves exceeded the amount

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<sup>52</sup> Appendix 2, paragraphs 5 and 27.

reported by ETI for all CLECs in each of the years between 2004 and 2007.<sup>53</sup>  
(footnotes omitted)

69. Thus, the experience in Canada clearly demonstrates that mandated access at reduced rates does not encourage investment. Facilities owners reduce or stop investment and non-cable CLECs have reduced investment.

70. MTS Allstream also tries to demonstrate that experiences in the U.K. are consistent with abundant European experiences that indicate that granting access on reasonable terms and conditions does not limit the incentives to invest.<sup>54</sup> This is simply not correct.

71. In a recent peer-reviewed journal article titled *Net Neutrality, Unbundling, and their Effects on International Investment in Next-Generation Networks*, authors Scott Wallsten and Stephanie Hausladen use data from the European Community to explore the effects of unbundling on investment in next-generation infrastructure. The authors examine the correlation between the use of unbundled loops and bitstream unbundling and the rollout of fibre to the home, broadband over wireless local loops, cable broadband, and facilities-based DSL. They find that:

... controlling for income, country fixed effects, and time fixed effects, countries with more broadband connections per capita provided through local loop or bitstream unbundling have fewer fiber connections and WLL per capita provided by the incumbent and entrants. Conversely, in countries where entrants provide broadband over their own DSL or cable infrastructure, incumbents provide more fiber. In other words, countries that rely more on unbundled lines to provide broadband see less investment by incumbents in fiber than countries that rely less on unbundled lines and more on facilities-based entry.<sup>55</sup>

72. Therefore, contrary to the position taken by MTS Allstream, the European and U.S. experiences appear to result in the same outcome as the experiences in Canada. Extensive obligations to provide mandated services at reduced rates decreases the incentives to invest in telecommunications infrastructure.

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<sup>53</sup> Appendix 3, paragraphs 24 and 25. RoR refers to the study conducted by Economics and Technology Inc. titled *The Role of Regulation in a Competitive Telecom Environment: How Smart Regulation of Essential Facilities Stimulates Investment and Promotes Competition*, Appendix 2 of the MTS Allstream petition.

<sup>54</sup> MTS Allstream petition, paragraph 99.

<sup>55</sup> Wallsten, S. and S. Hausladen, (2009) *Net Neutrality, Unbundling, and their Effects on International Investment in Next-Generation Networks*, *Review of Network Economics*, 8(1): 90-112, page 102.

73. Finally, MTS Allstream argues that the implications of not granting access by competitors to an incumbent's network on reasonable terms and condition will hurt Canada's international ranking for broadband penetration<sup>56</sup> and would have a negative impact on Canadian GDP and jobs.<sup>57</sup>

74. Canada's international broadband ranking may not be as dire as MTS Allstream argues. As Mr. Goldberg shows, Canada is still a leader in broadband infrastructure and it is inappropriate to import European solutions given that they do not share the same competitive situation as Canada:

The OECD regularly produces a survey that examines both business and residential broadband connections (subscriptions) as a proportion of the total population. As will be seen in Table 1 below, there is a balance between telephone companies (reflected as DSL connections) and cable companies in Canada, which distinguishes the Canadian competitive environment from that of most OECD countries; most OECD countries have an overweighting of DSL connections.

Table 1, *OECD Broadband connections per 100 inhabitants*, demonstrates that Canada leads the OECD in cable broadband; Canadians led other nations in the percentage of the population that has chosen high speed internet connections offered by cable companies. As will be discussed in Section 4 below, Canadian cable companies have been leaders in delivering advanced technology to their customers and cable operators are serving residential and business customers with high speed internet connections.

Contrast Canada's cable adoption rate (55%) with the OECD as a whole, where 60% of all broadband connections are over DSL while only 29% are over cable. These are very important factors that must be considered when critics call for importation of European regulatory solutions to be imposed. The OECD figures reflect a healthy level of facilities-based competition in Canada, with cable and telephone companies both capable of providing service to most Canadians.

Canada's development of competitive residential infrastructure is more balanced than any of its OECD counterparts. The Lemay-Yates paper reviews mandated access policies in Sweden, France, Germany and the UK. A glance at the OECD figures in Table 1, comparing telephone company DSL connections to cable connections shows a clear dominance of DSL technology in those countries: Sweden (75.7%), France (95.1%), Germany (93.9%), UK (78.6%). Compared to the same ratio for Canada (45.8%), it is not surprising that regulators in those countries are looking for a means to increase choice to users.

However, it is inappropriate to import a European solution which imposes strong regulation on telephone companies when Canada does not share the same

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<sup>56</sup> MTS Allstream petition, paragraphs 95 and 96.

<sup>57</sup> MTS Allstream petition, paragraph 81.

competitive situation with these European countries that are experiencing overwhelming dominance by incumbent telephone companies in the provision of facilities-based internet services.<sup>58</sup> (footnotes omitted)

75. With respect to the negative impact on Canadian GDP and jobs, MTS Allstream simply states that since Canada's GDP is approximately 9% of U.S. GDP that the impact in Canada would be 9% of the impact on GDP and jobs determined in a U.S. study conducted by ETI.<sup>59</sup> In other words, MTS Allstream's headline grabbing claim of 21,000 lost jobs and \$6 billion in lost GDP is simply an arithmetic application of an assumption about the U.S. relative to Canada. However, given the structural differences between the Canadian and U.S. economies (Canada being a small, open, exporting country and the U.S. being a large, closed, importing country), it is highly speculative to extrapolate the U.S. experience into Canada.

76. Furthermore, and much more importantly, it is clear that the economic impact determined by ETI is completely unsound. The basis of ETI's analysis is that deregulation has resulted in excess prices for special access services. As Dr. Taylor shows, the Federal Communications Commission has found that these prices are not excessive and the ETI misinterprets the results from the macroeconomic model that they used:

ETI uses results from a commercial macroeconomic model of the US economy to claim that excessive special access prices would — in the model — depress US employment and GDP. However, in the real world, special access prices are not excessive, and the mandatory reductions in special access prices that ETI advocates would not have the macroeconomic effects indicated by the model. As the FCC has found, US special access prices are not excessive simply because accounting rates of return based on fully-distributed regulatory accounting costs exceed an authorized level. And, if this logic made any sense — which it does not — the fact that the same accounting rates of return for the aggregate of regulated services<sup>60</sup> are *below* their authorized level would imply that telecom policy in the aggregate has *increased* US employment and GDP rather than the reverse, as ETI claims. Finally, ETI misinterprets the results from the macroeconomic model in which prices are determined endogenously (*i.e.*, within the model itself). The results the model reports stem from theoretical productivity increases and cost reductions in the telecommunications sector which lead to lower equilibrium special access prices. They are not the efficiency gains associated with a regulatory mandate to reduce special access prices without any changes in telecom productivity.<sup>61</sup>

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<sup>58</sup> Appendix 2, pages 11 and 12.

<sup>59</sup> MTS Allstream petition, paragraph 81.

<sup>60</sup> Of which interstate special access services are one component.

<sup>61</sup> Appendix 3, paragraph 64.

77. Obviously if the Canadian figures created by MTS Allstream are based on an extrapolation to Canada of the U.S. number, and the U.S. number has been proved to be complete fiction (as explained above), then there is no basis for the Canadian figures.

78. As the experiences in Canada demonstrate – which are consistent with recent findings from Europe and the U.S. – the failure to grant access by competitors to an incumbent's network on reasonable terms and conditions would continue to provide the appropriate incentives for investment in telecommunications infrastructure. It would not decrease Canada's international standing as a broadband leader, nor would it result in a dramatic reduction in Canadian GDP and jobs.

#### **4.0 CONCLUSION**

79. MTS Allstream has requested that the Government exercise its powers to direct the Commission to categorize both Ethernet and DSL facilities as "conditional essential" which are to be unbundled and provided by the incumbents to competitors at cost-based rates. Based on the arguments presented above, the Companies submit that MTS Allstream's petition for regulatory support must be rejected for two key reasons. First, within the telecom sector, MTS Allstream's request, wrapped in the guise of an appeal for greater competition, is really designed to ensure continued competitor reliance on the investment of others; it would protect certain competitors rather than promote competition. Second, at the greater macroeconomic level, MTS Allstream's mandated access proposal would be a recipe for disaster in terms of encouraging investment and innovation, and thus would ultimately weaken Canada's productivity.

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