



Chris Peirce  
Chief Corporate Officer  
MTS Allstream Inc.

4 May 2009

**by Courier**

Mr. Kevin Lynch  
Clerk of the Privy Council and  
Secretary to the Cabinet  
Privy Council Office, Langevin Block  
80 Wellington Street  
Ottawa, ON K1A 0A3

Dear Mr. Lynch:

**Subject: Petition to the Governor in Council – Bell Canada and Bell Aliant (“Bell”) and TELUS Communications Company (“TELUS”) (together, the “Applicants”) Application to review and vary certain determinations concerning Telecom Decision CRTC 2008-117 and to rescind Telecom Order CRTC 2009-111**

---

In accordance with *Canada Gazette*, Part I, 27 March 2009, the title and notice reference number DGTP-004-09, MTS Allstream Inc. submits comments in response to the petition by Bell Canada and Bell Aliant (“Bell”) and TELUS Communications Company (“TELUS”) (together, the “Applicants”) which have been filed, in separate petitions on 11 March 2009 (the “petitions”) asked the Governor in Council to vary Telecom Decision CRTC 2008-117, *Cybersurf Corp.’s application related to matching service speed requirements for wholesale Internet services*, 11 December 2008 and to rescind Telecom Order CRTC 2009-111, *Cybersurf’s application related to the implementation of Telecom Decision 2008-117 regarding the matching speed requirement*, 3 March 2009.

MTS Allstream’s comments on the Applicants’ petitions are accompanied by the following documents:

- a. Appendix 1: A Report by Economics and Technology Inc., “Choosing Broadband Competition over unconstrained incumbent Market Power: A Response to Bell and TELUS”;
- b. Appendix 2: A Report by Towerhouse Consulting., “Reply Report in response to Aron and Crandall”; and
- c. Appendix 3: A Report by Lemay Yates Associates Inc., “Wholesale access to NGN facilities: a key requirement for competition in Canadian wireline telecom markets.”

Mr. Kevin Lynch  
4 May 2009  
Page 2 of 2

Yours truly,

*[Original signed by C. Peirce]*

Chris Peirce,  
Chief Corporate Officer

Attachments

c.c: Ms. Pamela Miller, A/Director General, Industry Canada  
Bell  
TELUS

\* \* \* End of Document \* \* \*

Response of



to

**11 March 2009 Petitions of  
Bell Canada and Bell Aliant**

**And**

**TELUS Communications Company  
to the Governor in Council**

**4 May 2009**

## TABLE OF CONTENTS

I.	<b>INTRODUCTION: LET’S NOT GO BACK TO THE FUTURE .....</b>	<b>1</b>
II.	<b>BACKGROUND.....</b>	<b>6</b>
III.	<b>GRANTING THESE PETITIONS WILL REDUCE COMPETITION IN THE BUSINESS MARKET 9</b>	
	<b>Figure 1 .....</b>	<b>12</b>
	RESIDENTIAL, NOT BUSINESS, CUSTOMERS ARE THE FOCUS .....	13
	DECREASING THE EMPHASIS ON BUSINESS CUSTOMERS - WHILE RAISING PRICES .....	14
	WHOLESALE SERVICES ARE A SOURCE OF REVENUE .....	15
	INVESTING TAKES PLACE IN ORDER TO COMPETE .....	15
IV.	<b>THE ILECS WILL INVEST IN RESPONSE TO COMPETITION.....</b>	<b>18</b>
	DESPITE THEIR THREATS, BELL AND TELUS HAVE AND WILL CONTINUE TO INVEST .....	18
	<b>Cable competitors in markets where Bell threatens to withdraw service.....</b>	<b>20</b>
	BELL AND TELUS’S ARGUMENTS REGARDING THEIR RECORDS OF INVESTMENT ARE MISLEADING .....	21
	THE REAL RISK: LACK OF COMPETITION .....	24
V.	<b>INTERNATIONAL EXPERIENCE SHOWS THAT DEREGULATION DOES NOT INCREASE INVESTMENT .....</b>	<b>29</b>
	THE U.S. – DEREGULATION OF UNBUNDLING FAILED TO LEAD TO MORE INVESTMENT .....	30
	<b>Figure 2 .....</b>	<b>33</b>
	<b>Figure 3 .....</b>	<b>34</b>
	<b>Figure 4 .....</b>	<b>34</b>
	EUROPE – UNBUNDLING OF NETWORKS IS A KEY ENABLER OF COMPETITION .....	35
	OTHER COUNTRIES – AN INTERNATIONAL TREND TOWARD SHARING OF NGNS .....	38
VI.	<b>CONCLUSION .....</b>	<b>41</b>
	<b>SCHEDULE I – BELL’S AND TELUS’S INVESTMENT CLAIMS .....</b>	<b>43</b>
	<b>BELL.....</b>	<b>43</b>
	<i>The Development of Bell’s NGN.....</i>	<i>43</i>
	<i>The Development of FTTN .....</i>	<i>44</i>
	<i>The Capital Expenses of FTTN are Small Relative to Bell’s Overall Capital Spending .....</i>	<i>46</i>
	<b>TELUS .....</b>	<b>48</b>
	<b>Figure 6 .....</b>	<b>52</b>
	<b>Figure 7 .....</b>	<b>53</b>
	<b>TELUS Capital Expenditures and Capital Intensity 1994 - 2008 .....</b>	<b>53</b>

**I. Introduction: Let's Not Go Back to the Future**

1. Bell Canada and Bell Aliant ("Bell") and TELUS Communications Company ("TELUS") (together, the "Applicants") have, in separate petitions filed on 11 March 2009, asked the Governor in Council to vary Telecom Decision CRTC 2008-117<sup>1</sup> (the "Matching Speed Decision") and to rescind Telecom Order CRTC 2009-111<sup>2</sup> (the "Matching Speed Order"). Because each of the Applicants makes the same general arguments, MTS Allstream responds to both petitions herein.
2. The Matching Speed Decision and Order require incumbent local exchange carriers ("ILECs"), including Bell and TELUS, to make certain high-speed Internet services over their digital subscriber lines (known as aggregated ADSL<sup>3</sup>) available to wholesale competitors, at the same speeds that Bell and TELUS offer to their retail customers, at regulated rates. In the Matching Speed Order, the Canadian Radio-television and Telecommunications Commission (the "CRTC" or the "Commission") clarified that this requirement would apply to aggregated ADSL services that use both legacy copper networks and next-generation facilities (i.e. fibre). These determinations are based on the Commission's finding that absent mandated access by competitors, the likely result would be a substantial lessening or prevention of competition in the retail high-speed Internet services market.
3. In their petitions, Bell and TELUS rely on the current economic crisis, and the supposedly insufficient margins for providing wholesale aggregated ADSL service, as excuses to threaten the withdrawal of investment in next generation networks ("NGNs"). This claim, and the evidence on which it is purportedly based, is flawed and highly misleading. As detailed in this response, Bell and TELUS's NGN investments have

---

<sup>1</sup> *Cybersurf Corp.'s application related to matching service speed requirements for wholesale Internet services*, 11 December 2008.

<sup>2</sup> *Cybersurf's application related to the implementation of Telecom Decision 2008-117 regarding the matching speed requirement*, 3 March 2009.

<sup>3</sup> Aggregated ADSL access service establishes a single point of interface that provides competitors with high-speed access paths to ILEC end-user premises throughout an ILEC's operating territory. Competitors use aggregated ADSL access...services to offer retail high-speed Internet access services": Telecom Decision 2008-17, *Regulatory policy - Revised regulatory framework for wholesale services and definition of essential service*, 3 March 2008 at paras. 83-84.

been taking place incrementally over the last twenty years, and currently represent but a small fraction of their annual capital expenditures.

4. In fact, the unspoken goal of the petitions is to allow these large former monopoly providers to control the extent and pace of competition by preventing the majority of competitors from accessing their networks. This is particularly the case in business markets where cable – the largest competitor to these former monopolies in the residential sector – has little presence. If the Bell and TELUS petitions are granted, the result will be to slow, if not to forestall altogether, investment in services to business markets – not to increase investment, as the Applicants claim. Granting these petitions will allow Bell and TELUS to deny unbundled access to rival retail service providers while overcharging, and deriving excessive profits from, captive retail customers. In fact, granting their petitions would roll back the competitive landscape to 1995,<sup>4</sup> when no competitive service provider was able to offer high-speed access on the ILECs' networks unless they were within a certain distance of the central office. In essence, what Bell and TELUS seek is a predictable, and likely excessive, margin guarantee. Accordingly, it is the business community that will suffer most if these petitions are granted.
  
5. Indeed, the evidence presented by Drs. Aron and Crandall for TELUS is highly misleading in its treatment of business markets. As detailed in the attached analysis by Dr. Selwyn and his colleagues at Economics and Technology, Inc. (the "ETI Report"), Aron and Crandall, while appearing to make recommendations that apply to broadband provided across all product and geographic markets, base their analysis solely on residential mass-market services – not those provided to business customers. The ETI Report notes:

This lumping together of assorted geographic and product markets produces a distorted view of competition and investment incentives, which vary significantly among the various markets. In particular, there is no basis to assume that investment and competitive conditions for business services will simply mirror the conditions that are developing

---

<sup>4</sup> Prior to the introduction of Gateway Access Service ("GAS") by Bell Nexxia.

with respect to the cable/telco contest in urban and suburban residential markets.<sup>5</sup>

6. Bell and TELUS essentially claim to be the only parties capable of making the investments required to meet Canada's broadband requirements, and that such investments are only feasible if they do not have to provide unbundled access to competitors at regulated prices. In effect, Bell and TELUS would have the Government grant them, and them alone, the power to dictate the timing, extent, and conditions for building the broadband infrastructure that Canada needs, rather than relying on a competitive telecommunications market to spur investment. Such a view ignores the dynamic effects of competition in stimulating innovation and efficiencies, and invites the Government to take a policy position that is directly contrary to Canada's interests.
7. Granting Bell and TELUS's petitions would lead to a near-monopoly infrastructure in the business market – precisely the opposite of what Canada should be striving for. Both here and internationally, it is clear that creating the structure and conditions for a genuinely competitive market will create the right incentives for investment by all parties – not just by the incumbents. The international trend is in fact toward the functional separation of former monopoly telephone providers, which requires that wholesale services be provided to that provider's retail arm on the same terms and conditions as provided to its competitors. This is a far more robust approach to the sharing of networks; yet, even in that scenario it has been proven that incumbents will invest in such an environment, and that competitors and consumers alike benefit from the increased transparency of such an arrangement.<sup>6</sup>
8. This Government has acknowledged that a competitive telecommunications industry needs providers who use a combination of their own networks and elements leased from

---

<sup>5</sup> ETI Report at 3.

<sup>6</sup> See, e.g. the Towerhouse Report at 18-19, which notes the success of the functional separation of BT in Britain; the recommendations of the International Telecommunications Union ("ITU") that governments "consider a policy to separate the retail and wholesale functions of network infrastructure" and that industry players "move away from the assumption that excluding access to networks elements is the only way to secure revenue" (ITU, *Six Degrees of Sharing*, at 56-57); and recent considerations by the Australian incumbent, Telstra, to separate itself into retail and wholesale divisions (Michael Sainsbury and Jennifer

the incumbents, and has defined such competitors as “facilities-based competitors”<sup>7</sup> (“Facilities-Based Competitors”). Furthermore, this Government’s AWS policy has proven that the requirement to share in itself is a strong incentive to invest: while they were among the most vocal critics of any mandatory roaming requirement for new entrants before the Government’s policy was announced, since that announcement Bell and TELUS have decided to invest in a significant upgrade to their common wireless network (HSPA). As one observer has noted, this will create a new revenue stream for Bell and TELUS, who can now charge new wireless entrants to roam on their network – in competition with Rogers.<sup>8</sup>

9. Bell and TELUS’s threats about investment are empty. In order to retain and attract customers in the residential market, they will be compelled to invest in response to cable competition *where that competition exists*. This incentive exists independent of the question of wholesale access. However, because there is not an equivalent level of cable competition in business markets, only the mandated unbundling of facilities for use by competitors – such as that ordered in the Matching Speed Decision and Order – will produce the level of competition that will drive investment in business markets.
10. Bell and TELUS also claim to want protection from regulatory uncertainty. However, any prospective uncertainty results not from regulation (i.e., their being required to provide mandated access to their networks), but from the normal operation of competitive market forces. With these petitions, Bell and TELUS are asking the Government to grant them an exclusive franchise over the construction and operation of an NGN infrastructure – just as they enjoyed under the monopoly era, during which their wireline networks were built and which, according to Bell, allowed them to make “efficient investment decisions”<sup>9</sup> – but without any of the price regulation or earnings constraints that were a feature of rate of return regulation at that time.

---

Hewett, “Telstra open to break-up as broadband plan forces telecom to overhaul strategy”, *The Australian* (14 April 2009).

<sup>7</sup> This Government has defined a facilities-based telecommunications service provider “one that provides services in the relevant market either by using its own facilities and services or by using a combination of its own facilities and services together with those leased from other service providers”: See Order Varying Telecom Decision CRTC 2006-15, P.C. 2007-532, April 4, 2007, revising paragraph 243.



11. It is clear that Bell and TELUS are requesting that the Government protect them from competitive market forces, because they fear such forces will require them to forgo the supranormal profits they currently collect from their retail customers, particularly in the business market. Indeed, their hostility to competition is clear from the very first line of the TELUS petition, which refers to wholesale customers as “arbitragers”.
12. As the attached reports by ETI and Towerhouse Consulting demonstrate, international experience shows that only a fully competitive market – one that includes Facilities-Based Competitors – will reap the rewards of greater efficiency, productivity and economic growth that these Applicants claim to favour. The ETI Report finds that the decision in the U.S. to end both retail and wholesale regulation of incumbent last-mile facilities has allowed those providers to charge excessive rates and earn supracompetitive profits, has eroded competition in the market and has failed to create the promised transformation in the type and magnitude of ILEC broadband investments. Rather, it has decimated competitive entry and slowed the pace of broadband deployment, both in the consumer and business markets.<sup>10</sup>
13. As the International Telecommunications Union (“ITU”) has recently recognized, “It is now widely accepted that the most effective mechanism to achieve affordable pricing and high penetration levels is competition.” The ITU points out that the advantage of the incumbent networks, which were built under monopoly conditions, are not replicable by new market entrants. “On the other hand,” notes the report, “incumbents have an incentive not to give fair access to infrastructure in order to protect their own revenues and the inefficiencies associated with being a former monopoly.”<sup>11</sup>
14. MTS Allstream, in its own petition of 11 March 2009, described this Government’s road map to support competition and innovation in Canadian telecommunications markets. The Government is here faced with a choice: either to move forward, using this road map, and grant MTS Allstream’s petition; or to give in to the empty threats of Bell and

---

<sup>8</sup> David George-Cosh, “Bell, Telus partner in wireless network; 3G Technology; Companies will cut into Rogers’ market dominance,” *Financial Post* (11 October 2008) FP2.

<sup>9</sup> Bell petition at para. 23.

<sup>10</sup> ETI Report at 1.

TELUS. The latter course would forgo the development of any economically viable competition in the business market at all, and increase the likelihood of the re-monopolization of business markets where cable has little presence. In the residential market, this course would forgo competition from any providers other than the cable companies, effectively accepting a duopoly as “good enough”. MTS Allstream urges the Government to resist this attempt to turn back the clock of Canadian competition in favour of promoting a fully competitive telecommunications market that can fulfill its critical role as an enabler of economic growth and productivity.

## **II. Background**

15. The matching speed requirement for aggregated ADSL services was first established in Telecom Orders 2007-21, 2007-22, 2007-24 and 2007-25 (the “Orders”). In the Orders, the Commission concluded an intensive, five-year process respecting the provision of a number of services, including ADSL services, and collected an enormous body of evidence.<sup>12</sup> Among its determinations was that when an ILEC upgraded the speed of one of its retail Internet services, it was required to file a tariff offering a wholesale service with the same speed with no corresponding price change.<sup>13</sup>
16. The Orders were a significant step toward meaningful competition in the markets for high-speed Internet and related services. However, in the wake of the Orders, Bell and TELUS filed applications requesting that the Commission delay implementation of the Orders until after the release of the Commission’s determinations in an upcoming review of wholesale facilities and services. In Decision 2007-77,<sup>14</sup> the CRTC granted Bell and

---

<sup>11</sup> ITU, *Trends in Regulatory Reform 2008: Six Degrees of Sharing* at 51.

<sup>12</sup> This process included almost 20 tariff notices filed by the former monopolies as well as Part VII applications, decisions and orders, all dealing with various facets of Ethernet facilities and services. A nine-page chart listing the tortured history of these proceedings was filed as Appendix D to MTS Allstream’s 15 March 2007 Evidence in the proceeding leading to the Wholesale Decision, available online at [http://www.crtc.gc.ca/PartVII/eng/2006/8663/c12\\_200614439.htm](http://www.crtc.gc.ca/PartVII/eng/2006/8663/c12_200614439.htm).

<sup>13</sup> See, e.g. Telecom Order 2007-21, *Bell Aliant Regional Communications, Limited Partnership for services provided in the Atlantic Provinces*, 25 January 2007 at para. 24; Telecom Order CRTC 2007-22, *Bell Canada and Bell Aliant Regional Communications, Limited Partnership for services provided in Ontario and Quebec*, 25 January 2007, paras. 36-39; Telecom Order CRTC 2007-25, *TELUS Communications Company - Network-to-Network Interface Service, Wide Area Network ADSL Service, and Wholesale Internet ADSL Service*, 25 January 2007 at paras. 64-66.

<sup>14</sup> *Applications to review and vary Ethernet and ADSL Orders*, 31 August 2007.

TELUS's applications and rescinded the Orders, on the grounds that there was significant regulatory uncertainty until the wholesale review took place. This further delayed access by competitors to these vital services for another two years.

17. In the decision resulting from the Commission's review of wholesale facilities and services (the "Wholesale Decision"<sup>15</sup>), the Commission classified the aggregated ADSL service (in respect of which the matching service speed requirement was sought) as "conditional mandated non-essential." This category was intended to capture services that the Commission determined do not meet its criteria for essential services, but nonetheless must continue to be mandated for specific reasons. In the case of aggregated ADSL services, the Commission made an explicit finding regarding the impact on broadband competition of the withdrawal of mandated access, finding such withdrawal would "likely result in a substantial lessening or prevention of competition in retail high-speed Internet access services."<sup>16</sup> (Emphasis added) Notably, the Commission also acknowledged the need for an unbundled ADSL offering, recognizing that the aggregated ADSL service was insufficient.<sup>17</sup>
18. Despite categorizing this service as conditional mandated non-essential, the Commission neither considered nor ruled on the matching speed requirement in the Wholesale Decision. Accordingly, Cybersurf (a competitive Internet Service Provider, or ISP) applied to have this requirement, which had been previously rescinded, reinstated. In the Matching Speed Decision, the Commission did so, again finding as a fact that the impact on competition of its refusal would be a substantial lessening or prevention of competition:

[M]arket forces cannot be relied on to address the relief sought by Cybersurf. In the Commission's view, the ILECs have little incentive, if any, to negotiate matching aggregated ADSL service speeds with competitors... The Commission considers that absent a matching service

---

<sup>15</sup> Decision 2008-17, *Regulatory policy - Revised regulatory framework for wholesale services and definition of essential service*, 3 March 2008.

<sup>16</sup> Wholesale Decision at paras. 85-86.

<sup>17</sup> Wholesale Decision at paras. 73-77.

speed requirement, the ability of competitors that rely on the mandated aggregated ADSL service to compete in the retail market would be significantly restricted, which would likely result in a substantial lessening or prevention of competition in the retail high-speed Internet services market.<sup>18</sup> (Emphasis added)

19. The Commission also determined that “[T]he rates to be charged by the ILECs for access to such services by competitors will be set on the basis of causal costs plus a reasonable markup, which will ensure that access is provided on an economically efficient basis.”<sup>19</sup> In response to complaints from Bell and TELUS that this would deter investment, the Commission noted “this proceeding is limited to addressing the issue of matching service speeds of the ILECs’ aggregated ADSL access services, which are provided over copper facilities.”<sup>20</sup>
20. Following the issuance of the Matching Speed Decision, Cybersurf sought clarification of the scope of the decision. In response, Bell asserted that the Matching Speed Decision applied only to services offered over purely copper facilities, not over next-generation fibre to the node (“FTTN”) or other services that combined the use of both types of facilities. For its part, TELUS submitted that the Matching Speed Decision should apply only to existing services, not new ones. While these arguments were being considered by the Commission, TELUS and Bell also requested that the due-date for the required ILEC tariff filings be extended from 26 January to 12 March 2009, purportedly in order to have enough time to contact competing ISPs, determine which areas in their serving territories could provide matching wholesale facilities, conduct the necessary costing studies and develop appropriate tariff notices to comply with the Matching Speed Decision.
21. In the Matching Speed Order, the Commission found Bell’s interpretation of the scope of the Matching Speed Decision unduly narrow. It clarified that “provided over copper facilities” means “to the extent that the service is provided over a path that includes

---

<sup>18</sup> Matching Speed Decision at paras. 18-19.

<sup>19</sup> Matching Speed Decision at para. 21.

<sup>20</sup> Matching Speed Decision at para. 22.

copper facilities, the service is subject to the requirements of the decision” (emphasis added).<sup>21</sup> The Commission also rejected TELUS’s submission, noting that providing a higher speed service was not a new service, but the same service at a different bandwidth.<sup>22</sup> It directed the ILECs to file revised tariff pages within 10 days (i.e. by March 13).

22. On March 11, TELUS and Bell filed applications to stay the Matching Speed Decision and Matching Speed Order. MTS Allstream and other providers opposed the requests for a stay, arguing that the applicants had not satisfied the legal tests required. As of the date of this response, the stay applications are pending before the CRTC.
23. Also on March 11, Bell and TELUS filed their petitions. On the same date, MTS Allstream filed its own petition to the Governor in Council, challenging Telecom Decision CRTC 2008-118<sup>23</sup> and Telecom Regulatory Policy CRTC 2009-34.<sup>24</sup>

### **III. Granting these Petitions will Reduce Competition in the Business Market**

24. Government policy rightly focuses on competition, and the need to encourage economic growth and productivity. However, granting the Bell and TELUS petitions will act to reduce competition in business markets, contrary to Government policy and the best interests of the Canadian economy.
25. In its Policy Direction to the Commission respecting the implementation of the policy objectives in the *Telecommunications Act*<sup>25</sup> (the “Policy Direction”) this Government noted that that the Commission should “rely on market forces to the maximum extent feasible as the means of achieving the telecommunications policy objectives.” Such a directive, of course, presumes that there are competitive market forces in existence that

---

<sup>21</sup> Matching Speed Order at para. 12.

<sup>22</sup> Matching Speed Order at para. 13.

<sup>23</sup> *Regulatory policy - MTS Allstream Inc. – Application to review and vary certain determinations in Telecom Decision 2008-17 regarding the classification of wholesale Ethernet services*, 11 December 2008.

<sup>24</sup> *Requests to review and vary directives in Telecom Decision 2008-17 related to the provision of central-office based wholesale ADSL access service and aggregated ADSL access service*, 26 January 2009.

<sup>25</sup> *Order Issuing a Direction to the CRTC on Implementing the Canadian Telecommunications Policy Objectives*, P.C. 2006-1534, December 14, 2006.

can be relied upon. Recognizing that this was not always the case, the Policy Direction directed the Commission to undertake its review of wholesale services, bearing in mind “the potential for incumbents to exercise market power in the wholesale and retail markets for the service in the absence of mandated access to wholesale services, and the impediments faced by new and existing carriers seeking to develop competing network facilities.” This was precisely what the CRTC did in the Matching Speed Decision and Order.

26. In the recent auction for wireless spectrum (the “AWS Auction”), the Government itself bore such considerations in mind. The wireless market in Canada has long been served by three major providers, and there has been insufficient competition to produce the kinds of customer choice, innovation, and lower services that the Government recognized as desirable. The Government thus found that it was in the public interest to set aside spectrum for new entrants because reliance on market forces alone would be insufficient to stimulate market entry, and mandated tower sharing and access to underlying facilities as well. Thus, rather than spending their resources inefficiently on replicating existing facilities, new entrants will be able to focus their investments on innovative new products and services, providing genuine competition to end-users in the mobile market. This Government has also recognized that Facilities-Based Competitors are fundamental to ensuring that Canadians have a healthy choice of competitive providers.<sup>26</sup>
27. The importance of a competitive market in bringing benefits to the Canadian economy cannot be overstated. As a result, the Government should look carefully at the repercussions that granting Bell and TELUS’s petitions would have on the business sector.
28. It is surely no accident that there is little discussion in the Bell and TELUS petitions of the needs of business customers for competitive alternatives, even while they speak glowingly of the benefits of broadband for the economy. This omission is glaring, for a large part of the rationale of the Bell and TELUS petitions is ostensibly to encourage the

---

<sup>26</sup> *Order Varying Telecom Decision CRTC 2006-15, P.C. 2007-532 April 4, 2007 (the “Order in Council”).*

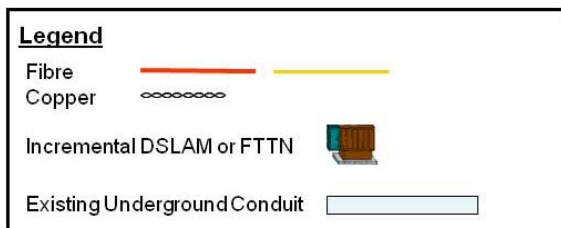
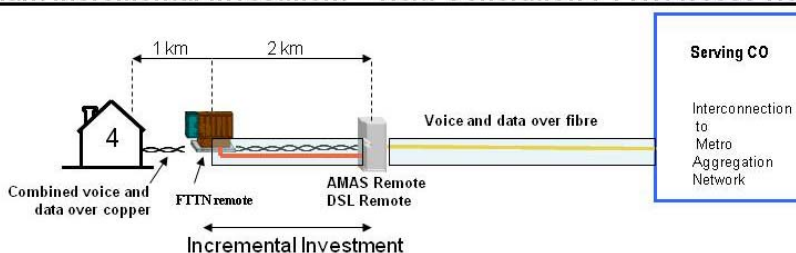
kind of growth and investment that is driven by business customers, not the residential, mass market.

29. For example, the benefits of broadband that are cited by the Applicants – including productivity, economic stimulation, access to education, health care, ICT investment, high-quality video conferencing, and online commerce – primarily accrue to Canada through its businesses, particularly small and medium-sized businesses (“SMBs”). But the arguments that Bell and TELUS make respecting the need for investment to foster economic growth do not accord with the primary focus of their investments, which is the residential market. Their petitions specifically fail to address the unique needs of business customers, the nature and challenges of supplying the business market, or, most crucially, the lack of competitive alternatives open to business customers in Canada. Similarly, as discussed in detail in the ETI and Towerhouse Reports (attached as Appendices A and B to this submission, respectively), the report authored by Drs. Aron and Crandall for TELUS focuses exclusively on residential mass-market broadband services, not services to business customers. Aron and Crandall conflate the data for these two very distinct sectors in their analysis, refer to information which is out of date, and quote selectively from their sources to justify their conclusions.
  
30. Bell and TELUS also paint a misleading picture of the development and deployment of NGN networks. This is not, contrary to the implication in their petitions, about the revolutionary creation of an entirely new network, but simply a further stage in the evolution of broadband infrastructure. As detailed more fully in Schedule I to this response, both Bell and TELUS began deploying fibre or NGN technologies in their networks in the mid-1980s, close to 25 years ago. Over the last two decades, they have continued to roll out fibre facilities throughout their core, distribution and access networks, and transitioned their legacy circuit-switched networks to an IP-based/broadband infrastructure. As shown in Figure 1 below, voice and data over fibre was provided between the serving CO and remotes during this period. They began rolling out ADSL service in the latter half of the 1990s, including the provision of high speed ADSL-based Internet access service. The NGN capital expenditures that they threaten to withdraw are shown as “incremental investment” in Figure 1 - specifically, the

running of fibre between the AMAS or DSL remote to the FTTN remote (Running fibre to the node means shorter copper loops between the FTTN remote and the home, which allows for the provision of higher speed and higher capacity broadband). These investments represent but a fraction of their overall capital expenditures today: but it is clear that they will spend even that amount only where they must.

Figure 1<sup>27</sup>

**Bell/Aliant Incremental Investment – Next Generation FTTN Access Network**



31. Unlike in residential markets, competitive alternatives for business customers are limited, and the former monopolies are often the only providers with facilities available to business locations. As noted in the report by Lemay-Yates Associates Inc. (the “LYA Report”, attached as Appendix 3), building fibre optic facilities to reach business locations is not a priority for any of the cable companies. Municipal electric utilities have invested in business access facilities in selected markets, most notably in Ontario and Quebec, but have very limited coverage. For example, Toronto Cogeco Data Services

<sup>27</sup> Source: Bell/Aliant 12 March 2003 submission at 27 – Followup to Telecom Regulatory Policy CRTC 2009-34 regarding an unbundled ADSL access service.



(formerly Toronto Hydro) has spent 10 years to build its network, but serves only 514 business locations.<sup>28</sup>

32. A review of Bell and TELUS's annual reports makes four facts about their investment claims abundantly clear. First, residential, and not business, customers are the primary focus of this investment. Second, Bell in particular does not anticipate making serious investments in networks to serve the business market. Third, despite its assertions to the contrary, wholesale revenues are important to Bell's profitability. And fourth, Bell and TELUS have no choice but to invest where competition from cable companies is present.

Residential, not business, customers are the focus

33. In its 2008 Annual Report, BCE identifies investing in broadband networks and services as one of its five strategic imperatives,<sup>28</sup> and states:

Our broadband networks are the foundation of Bell's leading communications products and services and a major part of the better customer experience. ... We are greatly accelerating the rollout of our high-speed fibre to the node (FTTN) network, with about 2.4 million homes covered today and 5 million expected to be passed by 2012. FTTN is a key driver of improved product performance, decreasing customer churn and increasing average revenue per user.

The new Fibre to MDU (multi-dwelling unit) program announced as part of the 100-day plan offers the benefits of high-speed fibre to thousands of residents in hundreds of new high-rise developments. In major markets such as Toronto and Montréal, as many as 25% of our customer base live in MDUs.<sup>29</sup>

---

<sup>28</sup> LYA Report at 10.  
<sup>28</sup> BCE Inc. – 2008 Annual Report at 25  
<sup>29</sup> BCE Inc. – 2008 Annual Report at 11.

34. Similarly, the BCE Annual Report notes that “Bell Aliant plans to increase its investment in broadband expansion and new services. Additionally, it will build on its current technology and broadband assets and further develop IP services such as IPTV, residential high-speed Internet and fibre-related services.”<sup>30</sup>
35. These excerpts clearly demonstrate Bell’s focus on residential customers and services. Notably, however, this investment is targeted only for Bell’s incumbent territory: as discussed at paragraph 52, *infra*, Bell is not investing in its out-of-territory operations.

Decreasing the emphasis on business customers - while raising prices

36. The BCE Annual Report does refer to the business market, but almost as an afterthought: it notes that in addition to enhancing its networks through FTTN, Bell also aims “to develop and implement targeted marketing initiatives to further grow IP connectivity sales among business customers”.<sup>31</sup> In other words, it will market what it has rather than make business-specific investments. BCE notes that the current economic climate could mean that “more conservative investments by Enterprise customers may result in lower capital spending requirements to support business customers.”<sup>32</sup> BCE states that “While our SMB unit will continue to introduce service offerings to support its virtual chief information officer strategy, a greater focus will be placed on retaining local line and Internet access customers and maintaining ARPU levels. This will be done through new product introductions, increased pricing and customer service improvements.”<sup>33</sup> (Emphasis added.)
37. Accordingly, Bell’s focus going forward will not be on investing in networks to serve business markets, but on leveraging what it already has and increasing prices to a market already suffering from overly high rates and inadequate competition. Bell apparently believes it is worth its while to delay investment to NGNs as far as it can while attempting to maximize its profits from its legacy network.

---

<sup>30</sup> BCE Inc. – 2008 Annual Report at 27.  
<sup>31</sup> BCE Inc. – 2008 Annual Report at 25.  
<sup>32</sup> BCE Inc. – 2008 Annual Report at 26  
<sup>33</sup> BCE Inc. – 2008 Annual Report at 26.

Wholesale services are a source of revenue

38. Remarkably, given Bell's attitude toward competition in its petition, the BCE Annual Report notes that revenue growth of 1.5% in 2008 was driven, among other things, by "increased sales of IP and broadband connectivity services and ICT solutions to our business and wholesale customers, which outpaced the decline in revenues from the continued erosion of our local wireline and long distance businesses."<sup>34</sup> While no breakdown is provided, it is clear that wholesale services are providing an important source of revenue to the company, contrary to its claim that providing wholesale service at regulated rates creates uncertainty for its investments.

Investing takes place in order to compete

39. Finally, as more fully detailed in section 4 of this response, BCE's Annual Report reflects the simple fact that it must make broadband investments in order to compete with cable companies where they are present:

Cable companies have aggressively rolled out Internet networks offering higher speeds to their customers, forcing us to incur significant capital expenditures in order to also be able to offer higher speeds on our networks. The failure to make continued investments in our Internet networks enabling us to offer Internet services at higher speeds to our customers as well as our inability to offer a different range of products and services compared to our competitors could adversely affect the pricing of our products and services and our results of operations. Furthermore, as the penetration of the Canadian broadband Internet market reaches higher levels, the possibility to acquire new customers increasingly depends on our ability to win customers away from our competitors.<sup>35</sup> (Emphasis added)

---

<sup>34</sup> BCE Inc. – 2008 Annual Report.

<sup>35</sup> BCE Inc. – 2008 Annual Report at 55.

40. Because cable's ubiquity is not replicated in the business market, business customers are the ones who most critically need competitive alternatives. Thus to allow Bell and TELUS to only offer unregulated wholesale access is a recipe for less competition and less innovation, to the detriment of economic development.
41. Bell and TELUS clearly wish to reserve to themselves the terms of engagement with respect to who may use their facilities and how, with predictably adverse effects on competition. For example, in its petition, Bell states that it willingly offers services that are forborne from regulation to competitors "on market terms," and that if its petition is granted, it envisions continuing to partner with "some competitors" who will resell services on such terms.<sup>36</sup>
42. It is important, first, to understand what Bell means by "market terms." The granting of retail forbearance, which under the *Telecommunications Act* can only be granted where competition for a service is sufficient to protect the interests of users,<sup>37</sup> has in fact resulted in price increases to business customers in many areas across the country. This is particularly vivid in TELUS's operating territory. To take but a few examples, between August 2008 and the time of its petition, TELUS raised its prices for local business contract option services and forborne Centrex services by 20% each, eliminated customer volume pricing plans for private line interexchange channels on forborne routes, resulting in a rate increase of up to 43%, and has raised rates by 16% for newly contracted forborne interexchange private line ("IXPL") routes. For its part, in mid-2008, Bell raised rates for its competitor DNA DS1 Access service for all wire centre bands by between 4% and 21%. It is noteworthy that in the limited number of markets where there is competition in the business market, competitors' prices per local business line have gone down by an estimated 28% over the past three years, while the prices of the former monopolies have gone up by approximately 11%<sup>38</sup> Accordingly, in this context "market terms" is nothing more than a euphemism for "our terms, because there is no competitive market to exert downward pressure on our rates."

---

<sup>36</sup> Bell petition at para. 8.

<sup>37</sup> *Telecommunications Act*, s. 34(2).

<sup>38</sup> CRTC, Communications Monitoring Report 2008.

43. Moreover, without being required by regulation to provide them, these former monopolies can also refuse to give competitors access to their services altogether. For example, the genesis of the Matching Speed Decision was Bell's refusal to provide Cybersurf and other competitors with an upgraded wholesale service that would have been equivalent in speed to what Bell was providing to its own retail customers.<sup>39</sup> Similarly, in the proceeding leading up to Decision 2009-34, both the Canadian Association of Internet Providers ("CAIP") and the Coalition of Independent Service Providers ("CISP") noted that Bell Canada had denied competitor requests for ADSL access service listed in its General Tariff.<sup>40</sup>
44. Without mandated rates, Bell and TELUS are free to engage in pricing tactics – for example, a price squeeze – that give themselves an undue preference in the provision of these facilities and services. A price squeeze takes place when a vertically integrated company that controls certain wholesale services and facilities prices them at such a high level that no competitor can possibly make a profit, whether it is reselling the service or using it as an input to provide a service in combination with its own facilities. As a result, a price squeeze acts to diminish or preclude competition in a given market.
45. Finally, other anti-competitive tactics can be found in the proposed tariffs filed by Bell in response to the Matching Speed Order.<sup>41</sup> First, Bell has made a completely unsustainable distinction in these filings between services offered solely on their legacy copper facilities and those which use FTTN, despite the fact that all facilities-based carriers have operated a single hybrid network, comprised of both copper and fibre, for many years. Second, Bell has introduced usage-based billing, a completely new approach to its wholesale services, which allows Bell to charge its wholesale ISP customers excess charges where that ISP's end-user exceeds a certain cap. This removes the ability of an ISP to manage its own end-customers, and allows Bell to control the shape of competition, by restricting service offerings to those which are exactly the same as Bell itself can offer. This limits true customer choice and forestalls

---

<sup>39</sup> Decision 2007-118 at para. 18.

<sup>40</sup> Decision 2009-34 at para. 11.

<sup>41</sup> See Bell letter to Robert A. Morin, March 13, 2009, re: Bell Aliant Tariff Notice 242 and Bell Canada Tariff Notice 7181.

the development of innovative services that might be created by competitors who would otherwise combine their own value-added services and Internet facilities with those of Bell's. Such a mechanism also allows Bell to give itself an undue preference, since it can easily waive usage-based billing and caps for its own retail end-users while maintaining them for competitors. While it is currently proposing usage-based billing solely for its residential GAS customers, in the absence of regulation or competition, nothing prevents it from doing the same to business customers.

46. Bell and TELUS provide no economic rationale for their arguments as to why they should be allowed to charge monopoly rents for their facilities; they argue only that they need the additional profits of retail, rather than wholesale, customers to justify investment. As detailed in the next section, that threat is simply not credible. The real risk for Bell and TELUS is not the requirement to provide wholesale services at cost-based rates, but competition itself, particularly in the business market where there is no other ubiquitous facilities-based provider. It is noteworthy that BCE remains one of the most profitable public companies in Canada.<sup>42</sup> Competition endangers those profits – and that, for Bell and TELUS, is the real threat.

47. Granting these petitions will allow Bell and TELUS to control competition in business markets leading to higher prices and less choice for business customers. On the other hand, refusing these petitions and granting MTS Allstream's petition will encourage competition: precisely the incentive that will force Bell and TELUS to make the investments that will reap genuine benefits for the business community and the Canadian economy.

#### ***IV. The ILECs Will Invest In Response to Competition***

Despite their threats, Bell and TELUS have and will continue to invest

48. To begin with, MTS Allstream notes that it has, itself, made precisely the type of investments that Bell and TELUS are threatening they won't make. The rationale for

MTS Allstream's investment – and that for Bell's and TELUS's, too – is simple: in a market with cable competition, an ILEC must invest to remain competitive.

49. Bell itself has told the investing public as much. Bell's threat that it would terminate its NGN plans if its petition is not granted can easily be dismissed on this basis alone. In its 2006 Annual Report, Bell stated: "There is a risk that should the pace of our FTTN rollout be slower than currently contemplated in our business plan, our broadband ISP churn rate could increase beyond our current expectations, thereby adversely affecting our expected number of Internet subscribers."<sup>43</sup> Consequently, slowing let alone terminating its NGN plans would, according to Bell's own claims, risk market share loss first and foremost to the cable companies in the residence market.
50. It is clear that Bell and TELUS will build where competitive market forces require them to do so. Their own petitions show this to be true. For example, Bell notes that investments have already been made in Toronto and Montreal. This is clearly in response to competitive pressure; there is little, if any likelihood that Bell can afford to slow the pace of its planned investment if it wants to maintain or augment its customer base.
51. Moreover, while Bell claims that regulated wholesale access will create a new "urban divide" and lists communities where investment may have to "be reviewed", competitive pressures also exist in those communities which will force them to respond. As demonstrated in the table below, in each of those communities, there are cable high-speed Internet providers who are competing for the same customers. Since Bell itself concedes that "the Companies are under tremendous pressure to build networks that can compete with cable providers,"<sup>44</sup> its threat to "review" investment in these communities is simply not credible.

---

<sup>42</sup> BCE placed 5<sup>th</sup> on the Report on Business's list of the Top 1000 most profitable publicly traded companies in Canada last year: <http://business.theglobeandmail.com/v5/content/tp1000-2008/index.php>.

<sup>43</sup> BCE 2006 Annual Report at 40.

<sup>44</sup> Bell Petition at para. 5.

**Cable competitors in markets where Bell threatens to withdraw service**

<b>Market</b>	<b>Cable company</b>
Ottawa-Gatineau	Rogers, Videotron
Québec City	Videotron
Hamilton	Cogeco, Mountain Cablevision
Kingston	Cogeco
Kitchener	Rogers
London	Rogers
Niagara Region	Rogers, Cogeco
Sherbrooke	Videotron
Windsor	Cogeco
Moncton	Rogers
Fredericton	Rogers
Saint John	Rogers
Charlottetown	Eastlink
Sydney	Eastlink

52. It is true that Bell and TELUS will not face the same degree of competition in rural markets. Thus, if Bell and TELUS were threatening to withdraw investment solely from rural and high-cost serving areas, this could be a more plausible scenario that would affect the rollout of NGNs. However, this is not the focus of their petitions: the Applicants are clearly talking about urban areas. Accordingly, the question is not investment, but simply the timing of that investment.
53. It is notable that although TELUS is placing some emphasis on serving businesses out of territory, Bell is retreating from building its networks out-of-territory, i.e. in areas where it is a competitive provider. In a recent call with analysts, George Cope of Bell noted:
- ...we are not putting a lot of capital into what's known as the CLEC or Bell West. Um, we think the economic returns on that ... ah, don't work for our shareholders, and so we are being very very careful how we invest capital in our, ah, CLEC. ... We have a huge business out West with Bell TV



and Bell Wireless, and we have now got our Bell West business, ... we basically got that just about EBITDA breakeven now on, on, Bell West this year, it will be, but we're not putting a lot of capital there.<sup>45</sup>

54. Since ILECs out-of-territory are among the few competitors in the business market, this lack of investment has serious ramifications. Accordingly, without allowing other competitors onto the former monopoly networks, there will be little choice for consumers, particularly in business markets where cable is not an alternative.

Bell and TELUS's arguments regarding their records of investment are misleading

55. Bell and TELUS allege that mandating access to their NGNs will reduce their incentives to invest, to the detriment of the Canadian economy. However, as detailed below and in Schedule I to this response, their arguments as to the record of their investments are misleading.
56. At paragraph 3 of its petition, Bell states that:

In this economic climate, even though investments are scarce and the markets focus on short term gains and carefully scrutinize capital investments, the Companies continue to invest heavily in new infrastructure. Capital expenditure for the Companies this year alone will surpass \$2.5 billion. As for its NGN, Bell Canada and Bell Aliant have invested well over \$1 billion dollars in the last three years since they began building their NGNs to Canadian homes and businesses. As a result of these investments, the Companies will be able to offer new advanced services to businesses, and higher speed Internet and next generation television services (in the form of IPTV). For Bell Canada, this new network has been largely built in Toronto and Montréal. The Company's NGN reached 2.4 million homes by the end of 2008. It recently announced plans to spend \$700 million to accelerate this

---

<sup>45</sup> Commentary on Bell West, 12 Feb 09.

network build to reach 5 million homes by 2012; but that announcement was made on the expectation that the CRTC would not mandate wholesale access at regulated rates to these networks. (Emphasis added.)

57. In addition, Bell adds at paragraphs 10 and 11 of its petition that:

... ILECs, including the Companies, have been building networks which, until quite recently, were based upon copper wire technology. In most cases, it took more than a hundred years to build what is commonly referred to as the legacy copper network. The invention and adaptation of fibre optic technology has allowed for the design of new telecommunications services characterized by broadband networks at much higher speeds.

...

The ubiquitous high-speed broadband networks utilizing fibre optic technology are commonly described in a collective fashion as NGNs. It must be appreciated that the design and integration of NGNs represent one of the largest civil engineering projects ever undertaken in Canada. As noted, the legacy copper network took a hundred years or more to build but NGNs are planned to be rolled-out in five to eight years.

(Emphasis added.)

58. MTS Allstream submits that Bell's assertions with respect to its NGN build out are inflated and misleading in three respects.

59. First, Bell makes no distinction between (a) its overall NGN, which can include IP-based broadband access, transport, backbone, DSL, IPTV, etc., and which has been developed over the course of the last 25 years; and (b) its FTTN initiative, which augments Bell's existing fibre to the remote network by bringing fibre closer to the

customer, and which Bell began rolling out only in 2004. While the FTTN project is large, it is but a fraction of the overall NGN network.

60. Second, the overall NGN did not represent “one of the largest civil engineering projects ever undertaken in Canada” as claimed by Bell but rather, as described in Schedule I, took place through an incremental series of advances that augmented existing legacy networks. Bell’s NGN facilities still rely on legacy infrastructure – including poles and conduit, much of which was constructed while the Companies were operating as government-protected monopolies – and copper accesses into homes and many businesses.
61. And third, it is important to distinguish between the general NGN network and the FTTN project in order to fully understand the claims Bell is making about the degree and scope of its investment. Although the numbers sound impressive, the FTTN initiative in fact has represented only about 5% of Bell’s average annual capital expenditures. Moreover, those capital expenditures have been declining in the past few years.
62. In the first paragraph of its petition, TELUS states that its 2009 capital program is expected to involve an investment of \$2.05 billion in its networks. It adds that it has spent hundreds of millions of dollars to date in a multi-year investment program in advanced wireline infrastructure to support next generation broadband services. Like Bell, TELUS argues that unless its petition is granted further investment in NGN technologies will be jeopardized.
63. A review of TELUS’s capital investment provides similar findings to those regarding the claims made by Bell. It shows that (a) TELUS’s investments in NGN networks began over 20 years ago; (b) its more recent FTTN investments build on or augment its existing ADSL and NGN backbone investments, and (c) its NGN or broadband access infrastructure investments represent only a small share of its overall annual capital expenditures, whether considered on a consolidated or wireline segment basis. In fact, TELUS’s investment in NGN or broadband access infrastructure amounts to roughly 10% of its total capex or 13% of its total wireline capex on an average annual basis.

64. Accordingly, it is clear that although both Bell and TELUS have been investing in their NGN networks over time, and are augmenting that investment with FTTN in recent years, their FTTN investments still do not represent a major share of their capital expenditures. Thus, although TELUS takes the view in its petition that the copper component of its network is “increasingly insignificant”, it nonetheless continues to spend the bulk of its wireline expenditures on maintaining that network, while steadily augmenting its existing access facilities by adding fibre-fed remotes or nodes in order to shorten copper accesses to customer premises.

The real risk: lack of competition

65. Bell and TELUS complain about “enormous additional risk”<sup>46</sup> because of supposedly inadequate returns on their wholesale services. They complain that rates for regulated wholesale access are not economically efficient. However, in the Wholesale Decision, the Commission dismissed the arguments made by TELUS in particular to change the costing methodology and mark-ups used for wholesale rates.<sup>47</sup> Moreover, neither of these former monopolies has raised the specific issue of risk in either the proceeding leading to the Wholesale Decision or in other proceedings since then.
66. In February 2008, the Commission held a review of certain Phase II costing issues to examine approaches and methodologies for calculating causal expenses for inclusion in regulatory economic studies, as well as to review other issues associated with costing.<sup>48</sup> Notably, at no time during that proceeding did either of the Applicants complain that the cost model used by the Commission was inappropriate. The cost model that has been used by the Commission since 1979 compensates carriers for their causal costs plus a reasonable mark-up. The model consists of a forward-looking, incremental cost standard that is internationally recognized. In the petition, however, the Applicants suddenly take the position that they should be able to recover their entire cost base, effectively including their sunk investments – without any justification beyond their

---

<sup>46</sup> Bell Petition at para. 18; TELUS Petition at para. 19.

<sup>47</sup> See Wholesale Decision at paras. 128-134.

<sup>48</sup> Telecom Decision CRTC 2008-14, *Regulatory policy – Review of certain Phase II costing issues*, 21 February 2008.

rhetorical assertion that they make insufficient margins from regulated wholesale services.

67. In fact, while Bell and TELUS argue that providing services at regulated wholesale rates is inadequate to compensate them for their costs, this is not the major issue. Competitors that use the ILECs' wholesale aggregated ADSL access services accounted for only 3.8% of retail high-speed Internet access revenues in 2007.<sup>49</sup> The reality is that Bell and TELUS simply do not want to share their network at all.
68. In addition, the arguments made by Aron and Crandall to the effect that dominant incumbent carriers have been subject to escalating risks as they pursue broadband deployment is based upon a seriously flawed analysis. As demonstrated in the ETI Report, as dominant carrier market power becomes more entrenched, risks – as perceived by investors – have been steadily decreasing. The ETI Report carefully examines the claims made by Aron and Crandall and finds no support for the financial equity betas they present in their analysis. To the contrary – and particularly as evidenced in these turbulent economic times – ETI notes that “telecom company betas have been *decreasing* over time, indicating that investors have come to view telecommunications companies as a safe haven from overall market risk”<sup>50</sup> (emphasis in original).
69. In truth, the risk is diametrically opposite to what Bell and TELUS claim. The risk is that where a former monopoly is the sole provider of an essential facility, that company has an enormous market advantage because it controls the price to which it sells its service to wholesale competitors and resellers – and so can crush competition, to the detriment of end-users and the economy as a whole.
70. As noted earlier, in the wireless sector, the Government recognized that having just three major providers of mobile services in Canada had led to a complacency that did not serve consumers, and that our wireless industry was in dire need of more

---

<sup>49</sup> CRTC, Communications Monitoring Report 2008, Table 5.3.1 at 210.  
<sup>50</sup> ETI Report at 25.

competition. Accordingly, it determined that it was in the public interest to set aside spectrum for new entrants in the AWS Auction because “in the absence of these measures, there exists a potential that reliance on market forces alone may serve to unduly restrict market entry, which could reduce innovation to the detriment of the industry’s advancement and, ultimately, to wireless users across Canada.”<sup>51</sup> In that same policy, the Government recognized the importance of wholesale access, and the ability that incumbents have to constrain competition in the absence of providing access to telecommunications facilities:

The telecommunications services market has characteristics which distinguish it from other industries. In particular, even new entrants that own and operate their network facilities (facilities-based entrants) require access to certain facilities of, and interconnection with, incumbents, while other service providers require access to the established network infrastructure to compete with incumbent carriers’ own services (e.g. VoIP, Internet access, and MVNOs). These characteristics unavoidably provide incumbent carriers with both incentives and opportunities to prevent market entry or constrain competition, even in markets with multiple providers.<sup>52</sup> (Emphasis added.)

71. In that case, the Government did not allow the self-serving arguments of the incumbents to dissuade it from introducing more competition to the wireless sector. The result will lead to a vibrant competitive mobile market in the long term, with attendant benefits for Canadians.
72. The same situation exists in business markets for next generation telecommunications services in Canada. At present, there is at least a duopoly in residential markets which, while far from ideal, serves to incent investments on the part of incumbent telcos. As limited as the choices may be in the residential market however, business customers

---

<sup>51</sup> Industry Canada, *Policy Framework for the Auction for Spectrum Licences for Advanced Wireless Services and other Spectrum in the 2 GHz Range*, November 2007 at 4.

<sup>52</sup> Industry Canada, *Policy Framework for the Auction for Spectrum Licences for Advanced Wireless Services and other Spectrum in the 2 GHz Range*, November 2007 at 3.

have even less choice, because there is no ubiquitous alternative infrastructure similar to cable. Thus, as this Government recognized when it issued the Order in Council, without allowing competitors mandated access at cost-based rates to the facilities of the former monopolies, prices will remain abnormally high, innovation will suffer, and business customers will have little, if any choice of providers.

73. The history of telecommunications in Canada is rife with examples of innovation being driven not by the former monopoly providers, but by competitors. As detailed in paragraphs 100-105 of MTS Allstream's petition, such innovative new services have typically taken shape when a competitor uses its own facilities in combination with facilities leased from the former monopolies, often used in conjunction with equipment located at the customer's premises, to offer creative alternatives to the incumbent's services. As customer demand for a particular solution and service increases, the incumbent is forced to respond. Initially in some cases, the former monopoly's response is to engage in anti-competitive behaviour. Eventually, seeing a threat to their market share, the former monopoly draws on its superior resources to offer a competing service, except of course the former monopoly is not required to lease facilities in its own operating territory. As the new offer grows, the customer-provided component is incorporated into the former monopoly's network. With the advent of competition in that market, competitors move on to innovate yet again in emerging forms of information and communications technology.
74. There are a myriad of examples of this pattern, ranging from the introduction of answering machines (which led to voicemail) in 1982, to dial-up Internet, Voice over Internet Protocol ("VoIP"), digital network services, IP Networking, E10/E100 Transparent LAN and xDSL technology, among other examples.<sup>53</sup> The evidence is clear: innovation on the part of a former monopoly is usually a reaction to competitor innovation. It is a virtuous cycle that can only take place in a dynamic competitive market.

---

<sup>53</sup>

For a complete description of each of these innovations, please see MTS Allstream's submission to the Telecommunications Policy Review Panel at para. 60, available online at <http://www.telecomreview.ca/eic/site/tprp-gecrt.nsf/eng/rx00043.html>

75. Moreover, any expansion of networks and any creation of new services driven by competition reaps rewards far beyond that one facility and investment. Enhanced broadband in particular gives a carrier the ability to generate revenues from any number of services that can be offered as a result of this greater capacity. An example of such a service is IPTV, which the Applicants are rolling out in order to compete with the cable carriers in the provision of broadcasting in their territories. Interestingly, Bell has not rolled out IPTV in its home territory of Ontario and Québec. As noted in the LYA Report, Bell's lack of an IPTV service offering in these provinces likely has more to do with its recent privatization effort and with its ownership of ExpressVu, a direct-to-home ("DTH") broadcasting distribution undertaking, than any regulatory uncertainty surrounding NGNs.
76. According to the LYA Report, Bell began investing in IPTV in 2006, but apparently put the project on hold in 2007. Comments LYA: "This and other initiatives were likely casualties of the BCE privatization plan, announced in June 2007. As part of the privatization plan, BCE reduced cash outlays for capital equipment and dividends. Once the privatization plan collapsed in late 2008, BCE reinstated its dividend and now finds it timely to "accelerate our fibre-to-the-node build by a year."<sup>54</sup>
77. The LYA Report also notes that an IPTV offering would be in direct competition with Bell's DTH service: "If Bell were to introduce an IPTV service, the competitive impact on its own ExpressVu service could be at least as great as it would be on either of its in-territory cable rivals, Rogers and Videotron."<sup>55</sup> On the other hand, the LYA Report adds that "blocking wholesale access to NGNs would further support ExpressVu by impeding the development of competing IPTV offerings."<sup>56</sup>
78. Even outside of Ontario and Québec however, Bell overstates the risk involved in IPTV investment and downplays its advantages. For example, Bell complains that if an end-user purchases an Internet service from a wholesale competitor, that customer is unable

---

<sup>54</sup> LYA Report at 16-17  
<sup>55</sup> *Ibid.* at 16.  
<sup>56</sup> *Ibid.*



to share the line with IPTV offered by Bell Aliant.<sup>57</sup> But IPTV would presumably act as an incentive for a customer to stay with Aliant and thus should be seen as an advantage, not a disadvantage, in any attempt by Bell to maintain or build its market share.

79. MTS Allstream, for example, has created a highly successful IPTV product. We introduced our industry-leading MTS TV service in Winnipeg in 2003 and have since expanded the network coverage and service offering to capture approximately one third of the Winnipeg market. MTS Allstream recently launched a new IPTV product in Portage la Prairie, using a supporting broadband infrastructure that also provides for higher performance Internet services. This is only possible because we have been able to generate funds from our broadband and TV services to invest in, enhance and expand our network. We are also re-investing in our Winnipeg broadband network and TV services to ensure our Winnipeg customers have the same advanced services as those in Portage la Prairie. Such investments have reaped numerous benefits for both MTS Allstream and our customers. And servicing wholesale customers in our incumbent territory gives MTS Allstream, just as it gives Bell and TELUS, a better chance of maintaining market share, rather than losing customers altogether to cable.
80. Customers in the residential market deserve more than a duopoly, and customers in the business market deserve competitive alternatives that will drive prices down and foster innovative new products and services. From a public policy perspective, the Bell and TELUS petitions should be rejected on this basis alone.

**V. *International Experience Shows that Deregulation Does Not Increase Investment***

81. While the Applicants argue that the U.S. and European experiences support the proposition that deregulation leads to more investment, a closer analysis of their evidence proves otherwise.

---

<sup>57</sup> Bell Petition at para. 28.

The U.S. – deregulation of unbundling failed to lead to more investment

82. A large part of Bell and TELUS's arguments rely on the notion that in the United States, ILECs found it uneconomic to invest in broadband because of unbundling requirements. As fully detailed in the ETI Report, however, this notion is based more on conjecture than evidence. Moreover, the argument that the subsequent deregulation of unbundling requirements in the U.S. led to more investment is a fallacy. The report by ETI filed with MTS Allstream's petition demonstrated that, based on the U.S. experience, withdrawal of regulated wholesale services is more likely to discourage investment in competitive ventures than to stimulate it, and will consequently create economic losses for the economy.<sup>58</sup> Indeed, ILECs in the U.S. have lagged behind Canada in the provision of Ethernet and other NGN services to the business market.
83. The ETI Report directly addresses the evidence of the Applicants with respect to their claims that deregulation is an incentive to invest:

As in Canada, there is far more propaganda than any hard evidence to support the claim that US ILECs found it uneconomic to pursue broadband investments because of unbundling requirements. In his "review of investments made by American ... ILECs in next-generation telecommunications networks," Bell's consultant, Dr. Sidak, quotes an August 2004 statement by a Verizon executive claiming that the company was bypassing many of its northeastern states for FiOS investment because of the "risk" of having to unbundle fiber. Even after the unbundling requirement was eliminated, however, Verizon has deployed FiOS plant mainly in the larger metropolitan areas in its operating territory. Moreover, Verizon has never indicated any intention to offer FiOS territory-wide and in 2006 announced plans to divest its northern New England (Maine, New Hampshire and Vermont) and upstate New York service territories altogether. Although the Company did not find a

---

<sup>58</sup> ETI, "The Role of Regulation in a Competition Telecom Environment: How Smart Regulation of Essential Wholesale Facilities Stimulates Investment and Promotes Competition", Appendix 2 to the petition of MTS Allstream, March 11, 2009.

buyer for upstate New York, it sold the three-state northern New England territory in 2008 rather than upgrade any of its facilities in those states to broadband.

TELUS' experts Aron and Crandall describe US ILECs' video service as "in its infancy" in 2004, before the FCC policy changes. Interestingly, the article that Aron and Crandall cite as their source makes clear that attempting to find a workable strategy for entering the video market had been identified as a priority by US ILECs as far back as the late 1980s. As the article makes clear, what finally propelled the ILECs forward with their investments over the past five years is competition from cable companies... Nowhere do these analysts associate the impetus to investment with unbundling or any other regulatory concessions.<sup>59</sup>  
(Internal footnotes omitted.)

84. The ETI Report also addresses Aron and Crandall's contention that accessing ILEC next-generation networks will force competitors to "seek innovative network access options". As ETI notes, they have failed to present any evidence to bear this prediction out.<sup>60</sup> The only example given by Aron and Crandall of a competitor that has successfully invested in its own broadband infrastructure is Level 3: a provider that focuses primarily on transporting intercity traffic and offering private line, Ethernet and Internet backbone transport services. Level 3 does not offer last-mile access, which is precisely what the Applicants are addressing in this petition.<sup>61</sup> In the U.S., as in Canada, competition in residential broadband is primarily being offered by the legacy cable companies, which already have a last-mile distribution network in place. Other than cable, ETI points out that "*there is little or no other "last mile" access investment taking place in the US either in the residential or business/enterprise segments*"<sup>62</sup> (emphasis in original.)

---

<sup>59</sup> ETI Report at 9-11.  
<sup>60</sup> ETI Report at 12.  
<sup>61</sup> ETI Report at 12.  
<sup>62</sup> ETI Report at 11.

85. ETI also addresses Bell's and TELUS's failures to address the effects of deregulation in the U.S. on NGN investment to serve the business market. ETI points out that the lack of a competitive market has slowed U.S. investment in this sector, whereas in Canada, mandated unbundling has resulted in the development of competition in the business market, thus forcing the former monopolies to invest:

Bell and TELUS both avoid discussing the effects of deregulation and forbearance in the US with respect to investment in NGN services to serve the business market. In this market, where there is no ubiquitous competitor (such as cable in the residential market), deregulation has clearly dulled the incentives of US ILECs to invest in the deployment of Ethernet and other NGN services *in large part because of the lack of any effective competitor in this segment*. At the same time, when US CLECs have attempted to push forward with Ethernet services, they have been hampered by the withdrawal of unbundled access... [U]nbundling of ILEC NGN facilities stimulates competitor investment because, by expanding the scope of connectivity that small TSPs can offer their customers, it makes their small networks more valuable and their investments more profitable. But without access to ILEC unbundled facilities, competitive investment has dropped to a trickle, and there is no significant competitive pressure to force the ILECs to expand their own NGN offerings.

By contrast, in Canada, the availability of access to unbundled ILEC NGN last mile facilities to competitors like MTS Allstream and others has facilitated their development of the market for Ethernet services, has forced the incumbents to offer these services as well, and has placed Canada well ahead of the US in the adoption of NGN services by business, enterprise, and government users.<sup>63</sup> (Internal footnotes omitted; emphasis in original.)

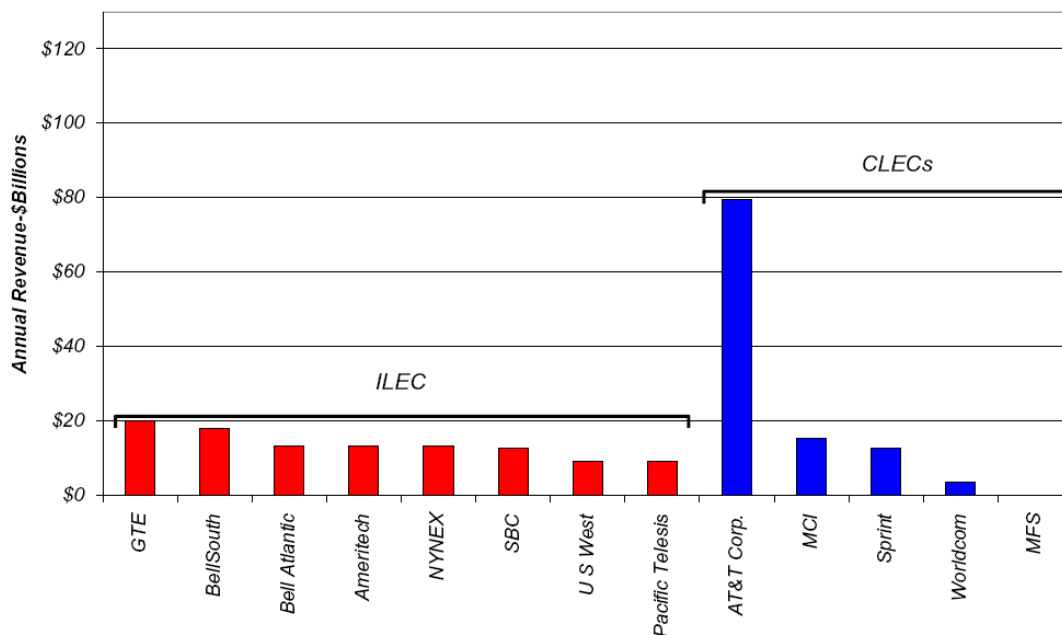
---

<sup>63</sup> ETI Report at 13.

86. Indeed, TELUS’s claim, in its petition, to have the “highest capital intensity...of any North American telephone company”<sup>64</sup> can be seen, in part, as a testament to the success of the Canadian approach relative to the American approach. Regulation of wholesale services has engendered more, not less, ILEC investment. To follow the U.S. path, i.e. to eliminate wholesale services regulation and the availability of access to competitors, will result in reducing competitive activity overall, which will in turn reduce TELUS’s (and Bell’s) need to competitively respond by investing in NGN services.
87. It is instructive to look at the revenue levels of the various players in the U.S. telecommunications market prior to the FCC’s decision to withdraw unbundled access and after. Between 1995 and 2008 we see considerable consolidation of the incumbents with accompanying market power, the virtual eradication of competitive local exchange carrier revenues, and the rise of cable companies who, of course, are not dependent on unbundled access to provide services.

**Figure 2**

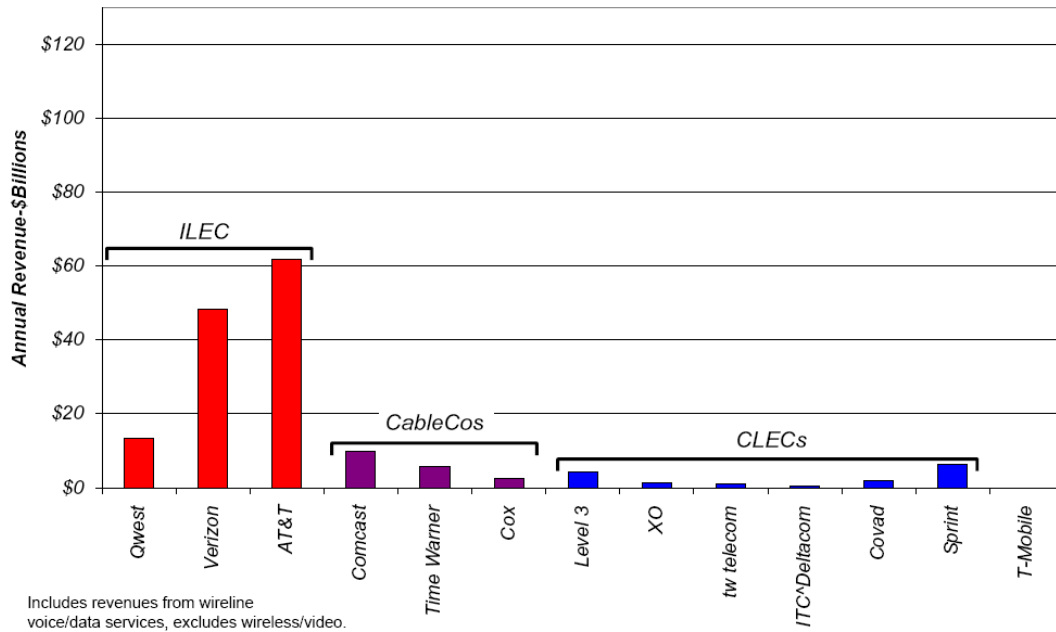
**Concentration of US Telecom Industry Revenues - 1995**



<sup>64</sup> TELUS Petition at para. 20.

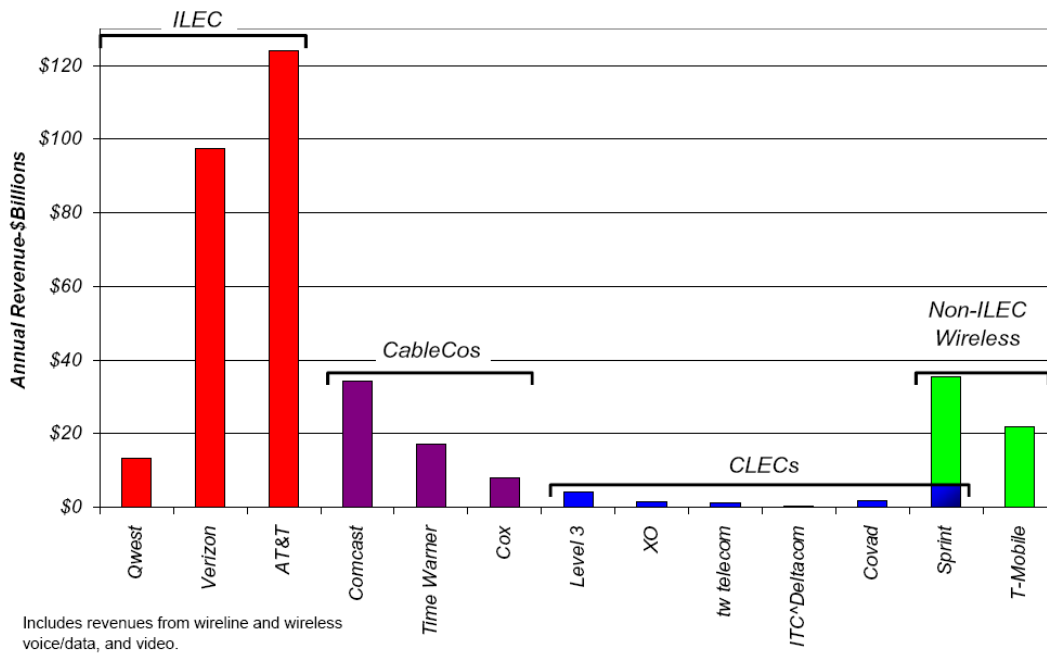
**Figure 3**

**Concentration of US Wireline Telecom Industry Revenues - 2008**



**Figure 4**

**Concentration of US Total Company Telecom Industry Revenue - 2008**



88. Finally, the ETI Report notes that each of the dominant incumbent providers in the U.S. have chosen very different strategies for providing broadband – strategies which remain unchallenged by competitors, to the detriment of end-users. ETI concludes:

The FCC's industrial policy has had the effect of declaring the RBOC the "winner" within each of their respective service territories, and no competitor operating at a scale sufficient to challenge the RBOC's deployment strategy in the marketplace has been able to enter the market. If retail-level competition were present – i.e., based upon a platform of unbundled ILEC network elements – consumers in all parts of the country would have more choice, and the dominant carriers' ability to dictate market outcomes would be attenuated. If, as Aron/Crandall acknowledge, it isn't even clear whether fibre should be deployed all the way to the home, then how can they justify promoting a government policy that would effectively ratify whatever deployment strategy the ILEC elects to pursue without any regulatory or market challenge to that decision?<sup>65</sup>

Europe – unbundling of networks is a key enabler of competition

89. The notion put forward by TELUS that the EU experience has not resulted in investment or in healthy outcomes is simply wrong. Aron and Crandall take the view that inter-modal competition is important, while intra-modal competition, of the type that is fostered by European regulatory regimes, should be dismissed. However, as the Towerhouse Report shows, there are a myriad of flaws in Aron and Crandall's paper. To name but a few, Aron and Crandall have quoted selectively from key reports; they contradict themselves by dismissing the value of the European experience on the one hand, while simultaneously citing a number of European examples which purportedly outstrip Canadian providers in the provision of NGNs on the other hand; they fail to distinguish between residential and business markets in their analysis; and they mischaracterize the success of unbundling in the U.K.

---

<sup>65</sup> ETI Report at 14.

90. The Towerhouse Report notes that it is well-recognized in Europe that replication of existing infrastructures is neither practical nor desirable, and that unbundling of networks and the provision of wholesale access is a key enabler of competition:

In the A&C paper, any service based competition is portrayed as a sort of freeloading which brings no benefits to either consumers or the ILECs. Although the investment required to roll out fibre is portrayed as risky and difficult to justify, Aron and Crandall claim that a decision against unbundling and wholesale access would encourage ILECs to build rival infrastructure. This is not realistic. Even in densely populated Europe the economics of multiple competing mass market access infrastructures do not add up. In Europe the focus has now shifted to facilitating competition by means of risk sharing and wholesale access as outlined succinctly in a report by the well-known telecoms institute, WIK:

*“19. The economics of FTTx do not support multiple replication of the access network sufficient to achieve effective competition. In case of (theoretical) replicability usually only one or in rare cases two operators (in addition to the first mover) can profitably invest in NGA infrastructure. In any case, replicability is limited to denser populated areas.*

*20. Introducing access remedies and/or wholesale products in addition to duct access lowers the critical market shares required for profitability and increases the degree and potential for competition. Access opportunities enable competition wherever a first mover (e.g. the incumbent) rolls out a FTTH NGA infrastructure and require lower market shares for profitability commensurate with market shares that might be realistically achievable in a competitive environment. Fibre LLU and SLU are also the prerequisite for getting (at least) the same*



*degree of competition as under the current unbundling model in the PSTN.*<sup>66</sup>

91. Regulators in Europe recognize that shared investments and wholesale access are an important part of the competitive matrix, and that competition will rely on both inter- and intramodal competition:

The current thinking of the European Regulators' Group (ERG) is that commercially open access may actually help to fill the new networks in a similar way to which the mobile market saw MVNOs help drive up the overall volume of traffic. It is recognized however that there is a need to maintain [the] 'ladder of investment' concept and incentivise competitors, and not just incumbents, to invest.<sup>67</sup>

92. While Aron and Crandall make much of the risk that would be posed to investment in NGNs by the granting of wholesale access to competitors – apparently on the basis that a regulated rate provides an insufficient return on the investment – the Towerhouse Report points out that they do not consider the fact that “the presence of retail operators using the wholesale products can grow the overall market and drive up the return for ILECs.”<sup>68</sup> Towerhouse cites the CEO of KPN, the incumbent in the Netherlands, as stating:

If you allow all your competitors on your network, all services will run on your network, and that results in the lowest cost possible per service. Which in turn attracts more customers for those services, so your network grows much faster. An open network is not charity from us, in the long run it simply works best for everybody.<sup>69</sup>

---

<sup>66</sup> Towerhouse Report at 10.  
<sup>67</sup> Towerhouse Report at 21.  
<sup>68</sup> Towerhouse Report at 12.  
<sup>69</sup> Towerhouse Report at 12.

93. Towerhouse also challenges Aron and Crandall's conclusion that there has been a lack of widespread fibre access due to the EU regulatory approach, noting that this conclusion not only fails to distinguish between the business and consumer segments, but fails to recognize the deployment of FTTP networks in France, the Netherlands, the UK and Sweden. With respect to the UK in particular, Towerhouse notes "the picture in business markets is of intensive network competition where it is economically viable, backed up by regulated access where it is not."<sup>70</sup>
94. Finally, Towerhouse points out that Aron and Crandall's thesis that unbundling obligations create increased risk is "completely contrary to the UK experience."<sup>71</sup> Ofcom, the UK regulator, has assessed the differing levels of systemic risk faced by different parts of BT's business, and has concluded that it is appropriate to apply a disaggregated approach to estimating that risk. Significantly, the activities of Openreach – the wholesale division of BT (the incumbent), which provides unbundled access to both BT and competitors on the same terms and conditions – were found to bear an assumed cost of capital lower than the rest of the BT group. Towerhouse concludes "the Ofcom view – not thus far challenged by BT – is that the unbundling activities specifically carry **lower** risk than the rest of BT" (emphasis in original).<sup>72</sup>
95. Accordingly, it is clear that Aron and Crandall have not accurately reflected the benefits that have accrued to European end-users from a regulatory approach that has focused on making both inter-modal and intra-modal important parts of the competitive environment. There is simply no compelling evidence that supports their argument that the approach taken in the EU acts as a disincentive to investment.

#### Other countries – an international trend toward sharing of NGNs

96. It is interesting that in Australia, where Aron and Crandall cite regulatory issues as delaying the deployment of NGNs, the government has recently announced it will ask private companies to join a new private-public firm to build a \$30.7-billion (U.S.) national

---

<sup>70</sup> Towerhouse Report at 10.  
<sup>71</sup> Towerhouse Report at 17.  
<sup>72</sup> Towerhouse Report at 18.

high-speed fibre-optic broadband network, with a view to selling its ownership in five years when the network becomes operational.<sup>73</sup> Significantly, at the same time it is considering substantial regulatory reform, including:

- streamlining current regulatory processes, by allowing the ACCC to set up-front access terms for companies wanting access to Telstra (the incumbent) and other networks;
- strengthening the powers of the ACCC to tackle anti-competitive conduct by allowing it to impose binding rule of conduct when issuing competition notices; and
- promoting greater competition across the industry, including through measures to better address Telstra's vertical and horizontal integration, such as functional separation.<sup>74</sup>

97. In the wake of this announcement, Telstra has indicated that it would be open to a voluntary separation of its retail and wholesale arms, and is co-operating in negotiations with the government.<sup>75</sup>

98. Also of note is a recent ITU report entitled "Trends in Telecommunications Reform 2008: Six Degrees of Sharing" (the "ITU Report"). The ITU Report notes the growing emphasis on deployment of fibre around the world. It concludes "Encouraging effective competition has proved to be the best way to promote ICT sector development and consumer accessibility. So, the promotion of long-term, sustainable competition remains an important regulatory task, often requiring regulators to respond to market failures."<sup>76</sup>

---

<sup>73</sup> Reuters, "Australia announces \$30-billion for broadband", *globeandmail.com*, April 6, 2009, available online at <http://www.globeinvestor.com/servlet/story/RTGAM.20090406.wbroadband0406/GIStory/>

<sup>74</sup> Government of Australia media release, online at [http://www.minister.dbcde.gov.au/media/media\\_releases/2009/021](http://www.minister.dbcde.gov.au/media/media_releases/2009/021)

<sup>75</sup> Sainsbury and Hewett, *supra* note 6.

<sup>76</sup> ITU, *Trends in Regulatory Reform 2008: Six Degrees of Sharing* at 16.

99. The ITU Report also points out that “in Europe, the countries with the fastest market growth are those that have effectively mandated unbundling (full unbundling, shared access, wholesale: bitstream and resale)” as well as encouraged the provision of naked DSL and promoted alternative infrastructures.<sup>77</sup> The case for sharing is straightforward:

The single biggest reason to adopt sharing is to lower the cost of deploying broadband networks to achieve widespread and affordable access to ICTs... For developed countries, infrastructure sharing promises to play an important role in the move to FTTx (fibre to the home/office, etc.) access, as well as reducing the environmental impact of ICT network deployment. In short, all countries share the goal of spurring network development.

But this goal costs real money. Deploying mobile base stations or fibre backbone networks to reach rural areas may be uneconomical if each company builds its own network. Likewise, laying fibre to every home, building or street cabinet may be unattainable if operators act alone. Companies can, however, share some infrastructure but compete in providing services. With an effective legal and regulatory framework and the right incentives, the critical factor in creating new, affordable broadband access and backbone networks will be government willpower.<sup>78</sup> (Emphasis added.)

100. The ITU Report acknowledges the need to balance the twin objectives of increasing competition and incenting investment, but notes that these two factors are “inextricably linked... It is now widely accepted that the most effective mechanism to achieve affordable pricing and high penetration levels is competition.”<sup>79</sup> The ITU points out that the advantage of the incumbent networks, which were built under monopoly conditions, are not replicable by new market entrants. “On the other hand,” notes the report,

---

<sup>77</sup> ITU, *Trends in Regulatory Reform 2008: Six Degrees of Sharing* at 21.

<sup>78</sup> ITU, *Trends in Regulatory Reform 2008: Six Degrees of Sharing* at 29.

<sup>79</sup> ITU, *Trends in Regulatory Reform 2008: Six Degrees of Sharing* at 51.

“incumbents have an incentive not to give fair access to infrastructure in order to protect their own revenues and the inefficiencies associated with being a former monopoly.”<sup>80</sup>

101. In considering the balance between competition and investment, the ITU finds that the benefits of access and sharing include greater innovation, lower prices, and a more competitive sector:

Providing network access at fair prices (usually some form of cost-based provision) allows for innovation by new entrants, particularly in service provision. Since essential facilities are the backbone of a telecommunication network, providing cheap access has immediate beneficial effects on the competitiveness of the sector and results in lowered pricing and increased penetration. Discriminatory practices by incumbent operators that prevent competition, usually by frustrating wholesale access to bottleneck facilities, have to be curtailed. The open access model is gaining momentum as a potential solution to the problem of ensuring that new entrants are able to enter a market that exhibits high structural barriers to entry.<sup>81</sup>

102. Thus, the ITU concludes that the unbundling options currently provided over copper networks should be extended to the fibre environment.<sup>82</sup>

103. In sum, while recognizing the need to incent investment in networks, the ITU Report makes a powerful case for a national policy that clearly and decisively recognizes the advantages of opening access to next generation networks.

## **VI. Conclusion**

104. The Government is faced with a choice: to either move forward, using its road map, and grant MTS Allstream’s petition, or to give in to the empty threats of Bell and TELUS. The

---

<sup>80</sup> ITU, *Trends in Regulatory Reform 2008: Six Degrees of Sharing* at 52.

<sup>81</sup> ITU, *Trends in Regulatory Reform 2008: Six Degrees of Sharing* at 52.

<sup>82</sup> ITU, *Trends in Regulatory Reform 2008: Six Degrees of Sharing* at 54.

latter course would forgo the development of economically viable competition from any providers other than the cable companies; accept a duopoly in residential markets as “good enough”; and, in particular, increase the likelihood of the re-monopolization of business markets where cable has little presence. MTS Allstream urges the Government to resist this attempt to turn back the clock of Canadian competition in favour of promoting a fully competitive telecommunications market that can fulfill its critical role as an enabler of economic growth and productivity.

**Schedule I – Bell’s and TELUS’s Investment Claims**

**Bell**

*The Development of Bell’s NGN*

105. Bell’s NGN is not, as Bell implies in its petition, a recent phenomenon. Bell began deploying fibre or NGN technologies in its network in the mid-1980s, close to 25 years ago. Bell’s witness panel which appeared before the Commission during the public hearing phase of the recent essential services proceeding confirmed this fact.<sup>83</sup> In particular, its witness panel explained that Bell began building inter-office fibre (what would be used to provide Ethernet Transport service today) in 1986, which was then followed by construction programs to deploy fibre optic cable into the feeder and distribution portions of its networks by augmenting (not replacing) copper trunking facilities that connect their central offices (“COs”) to remote switches and further, extending fibre in place of the copper loop itself.<sup>84</sup>
106. Over the last two decades or more, Bell has continued to roll out fibre facilities throughout its core, distribution and access networks, although in the latter case it generally deployed fibre to remotes rather than to customers’ premises (especially in the case of residential customers). In addition, over this same time period, Bell has transitioned its legacy circuit-switched network to an IP-based/broadband infrastructure.
107. With respect to NGN access technologies, Bell began rolling out ADSL service in 1996 in Ontario and Quebec.<sup>85</sup> The deployment of ADSL service followed the deployment of remotes which allowed customer voice and data traffic to be aggregated over fibre facilities and, at the same time, shortened copper loop lengths which also allowed the provision of high speed ADSL-based Internet access service.

---

<sup>83</sup> Telecom Public Notice CRTC 2006-14: *Review of Regulatory Framework for Wholesale Services and Definition of Essential Services* [hereinafter the “Wholesale Proceeding”], Bell Witness Panel Testimony, Hearing Transcript, Volume 3 at paras. 4550 to 4612, 4581 and 4612.

<sup>84</sup> A detailed discussion of the Bell and other incumbent telephone companies’ fibre deploy build outs over the last 20 years or more is provided in MTS Allstream’s responses to interrogatories in the Wholesale Proceeding, specifically at MTS Allstream(CRTC)12Apr07-203 PN2006-14.

<sup>85</sup> BCE 1996 Annual Report at 3.

108. Bell has been steadily investing in high-speed IP/broadband for years now. In 2000, for instance, this included \$326 million in capital expenditures mainly for the “accelerated deployment of high-speed Internet services and local infrastructure upgrading due to increased data demand.”<sup>86</sup> As can be seen from Figure 1 below, this amount represented just over 10% of Bell’s total capital expenditures in 2000 of \$2.9 billion.
109. Bell’s capital expenditures were ramped up further still in the following year, 2001, at which time \$1.3 billion was spent on the “continued deployment of high speed Internet access services” and “local infrastructure growth.”<sup>87</sup> Bell’s total capital expenditures peaked in 2001 at \$4.1 billion (representing an overall capital intensity level of 29% relative to total operating revenues).
110. In the following year, Bell reported that “[h]aving much of the significant capital expenditures relating to the build-out of our growth infrastructures behind us, we were able to reduce our capital expenditures by 25% in 2002 compared to 2001.”
111. Therefore, contrary to Bell’s implication that its entire NGN network was rolled out over five to eight years, it is clear that by the end of 2001, Bell had already put most of its NGN network into place, including extensive deployment of remotes.

### *The Development of FTTN*

112. In 2004, Bell began rollout of what it refers to as fibre-to-the-node or FTTN services to deliver voice, data, video over a single high-speed broadband network, with the goal of ultimately being able to reach roughly 85 per cent of all households in the Québec City to Windsor corridor (i.e., approximately 4.3 million households).<sup>88</sup> The FTTN project effectively involves the deployment of additional fibre-fed remotes in Bell’s existing network in order to shorten copper loop lengths to customers’ premises and, by doing so, allow the provision of higher speed DSL or what is also referred to as VDSL services. Bell’s capital expenditures increased slightly in 2004, partly due its VDSL deployment

---

<sup>86</sup> BCE 2000 Annual Report at 29.

<sup>87</sup> BCE 2001 Annual Report at 17.

<sup>88</sup> BCE 2004 Annual Report at 6.



and DSL expansion strategies, but also due to its migration to a single national IP-MPLS network.<sup>89</sup>

113. By 2006, Bell indicated that, as part of its FTTN deployment plan, roughly 3,600 neighbourhood nodes or remotes had been deployed. To fully complete its FTTN rollout, it indicated that some 11,000 to 12,000 nodes would have to be deployed at a total capital cost of \$1.2 billion. However, the 3,600 nodes already completed accounted for \$400 million of this total. Thus, at the time, it was determined that \$800 million was required to complete the FTTN project. The expected completion date for the rollout was 2011 at the time.<sup>90</sup>
114. Two years later, in 2008, Bell indicated that it was roughly at the half-way point of its FTTN deployment project – i.e., some 2.4 million homes could be reached by FTTN facilities, whereas the ultimate goal was to pass roughly 5 million households (a figure that was boosted from its initial target set in 2004).<sup>91</sup> According to Bell's 2008 Annual Report, the completion date to reach this target was moved out one year to 2012, although there was no indication that increased funding was required for the project.
115. Therefore, based on the information provided in Bell's Annual Reports, \$1.2 billion was allocated to its FTTN rollout project, spread out over the eight-year period 2004 to 2011 initially and then the nine-year period 2004 to 2012 – i.e., initially \$150 million per year, on average, spread over 8 years or, alternatively \$133 million per year, on average, spread over nine years.
116. Based on the information now provided in Bell's petition, \$700 million has now been allocated for the completion of the FTTN rollout project by 2012 –which amounts to \$175 million per year, on average, for the next four years (including the current year). This suggests that an additional \$100 million has apparently been allocated to the FTTN project, assuming half of the existing funding of \$1.2 billion had been spent as of year-end 2008.

---

<sup>89</sup> Bell Canada 2004 Annual Financial Information Report at 22.

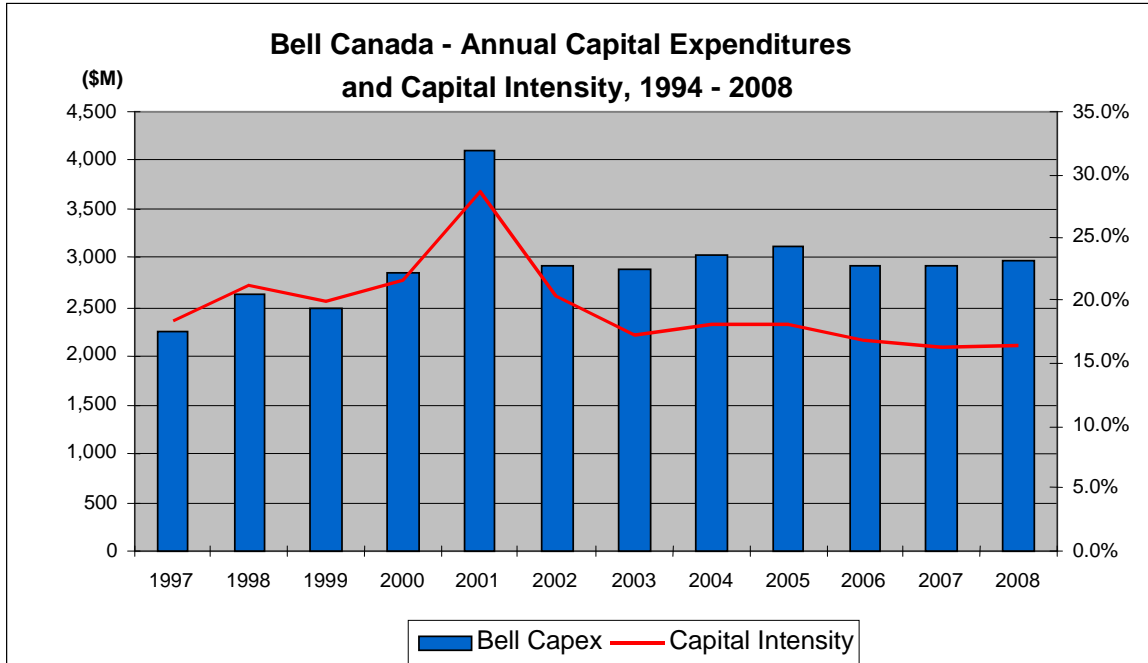
<sup>90</sup> See BCE 2006 Annual Report at 8 for these and other details of the plan.

<sup>91</sup> BCE 2008 Annual Report at 11.

*The Capital Expenses of FTTN are Small Relative to Bell's Overall Capital Spending*

117. It is important to put the FTTN project capital expenditures in some context. As shown in Figure 5, Bell's annual capital expenditures over the last 15 years varied from \$1.9 billion in 1995 to \$4.1 billion in 2001. The average over the period was roughly \$3 billion per year, representing an average capital intensity rate of 19.2%. Bell's FTTN project represents only 5% of Bell's total annual capital expenditure amounts on average.
118. In addition, Bell notes in its petition that, more broadly speaking, it has spent \$1 billion over the last three years building out NGNs to homes and businesses. It is not clear what is included in the \$1 billion investment figure but, in any event, it amounts to \$333 million per year on average or roughly 11% of the Bell's total average annual capital expenditures for the last 15 years. Even in this context, Bell's NGN spend represents a relatively small portion of its overall annual capital expenditures, on average.
119. Moreover, as Figure 5 illustrates, Bell's capital intensity level has declined significantly in recent years, averaging only 16.5% between 2006 and 2008. In its petition, Bell suggests that capital expenditures are expected to decline to only \$2.5 billion in 2009 (down from \$3 billion in 2008), independent of the issues raised in the petition itself, which could result in a capital intensity rate of less than 15%, well below the longer term average of just over 19%. Accordingly, even without the need to provide mandated services to competitors, Bell is already decreasing its rate of capital investment.

**Figure 5**



Source: *BCE Annual Reports 2003 to 2008, Segmented Results, and Bell Canada Annual Financial Information Reports, 1999 to 2002. Note that Bell Canada's capital expenditures include those relating to its wireline and wireless business segments in its traditional operating territories in Ontario and Quebec as well as the Atlantic Provinces (Bell Aliant) and its out-of-territory operations (as may be applicable on a year to year basis).*

**Bell Capital Expenditures and Capital Intensity  
 1994 - 2008**

<b>Year</b>	<b>Total Operating Revenues (\$M)</b>	<b>Capital Expenditures (\$M)</b>	<b>Capital Intensity</b>
<b>1994</b>	9,314	1,933	20.8%
<b>1995</b>	9,667	1,912	19.8%
<b>1996</b>	10,314	2,105	20.4%
<b>1997</b>	12,309	2,252	18.3%
<b>1998</b>	12,405	2,629	21.2%
<b>1999</b>	12,583	2,499	19.9%
<b>2000</b>	13,230	2,852	21.6%
<b>2001</b>	14,265	4,099	28.7%
<b>2002</b>	14,403	2,927	20.3%
<b>2003</b>	16,698	2,892	17.3%
<b>2004</b>	16,787	3,026	18.0%
<b>2005</b>	17,250	3,122	18.1%
<b>2006</b>	17,348	2,921	16.8%
<b>2007</b>	18,116	2,937	16.2%
<b>2008</b>	18,205	2,988	16.4%

Source: *BCE Annual Reports 2003 to 2008, Segmented Results, and Bell Canada Annual Financial Information Reports, 1999 to 2002.*

**TELUS**

120. Despite its rhetoric, TELUS's investments have also taken place over the long term and today represent but a minor portion of its annual capital expenditures.
  
121. To begin with, the 2009 \$2 billion capital expenditure estimate that TELUS provided in its petition applies to both its wireline and wireless operations. Based on recent figures (see Table 2 below), roughly 70% or \$1.4 billion of that estimate would likely apply to TELUS's wireline operations and the balance, \$0.6 billion, to its wireless operations. However, as discussed below, only a limited portion of the \$1.4 billion wireline

operations capital expenditure estimate (perhaps \$200 million) would likely apply to TELUS's NGN or broadband access infrastructure.

122. As in the case of Bell, TELUS began investing in fibre technologies in the mid to late 1980s. This was confirmed by the TELUS witness panel that appeared before the CRTC during the recent essential services proceeding.<sup>92</sup> And again as in Bell's case, during the 1990s, TELUS deployed fibre not only throughout its backbone network, but also into its feeder, distribution and access networks (through fibre-fed remotes in the last case). Thus, TELUS's investments in NGN technologies have in fact been underway for well over two decades.
123. Provision of ADSL-based broadband Internet services started in the latter half of the 1990s. TELUS invested \$44 million in 1999 to expand its ADSL high speed Internet services footprint, a greater amount than it had invested in this respect in the previous year).<sup>93</sup> At the time, among other things, TELUS's investment priorities included ADSL high speed Internet deployment together with next generation integrated network platform deployment.<sup>94</sup>
124. In 2000, TELUS acquired Clearnet and QuébecTel. This resulted in significant investment by TELUS in a national fibre-based IP backbone network that stretched across Canada. TELUS's national NGN network was lit in 2001, which allowed for the provision of a wide variety of services, from national private line to managed IP wavelength services.<sup>95</sup>
125. At the same time, in 2001, TELUS accelerated its rollout of broadband Internet services in Western Canada. Its objective was to build out its broadband facilities so that 95% of homes and businesses in its operating territory would have access to its high speed ADSL services within two years (i.e., by 2003). The planned capital expenditure to meet

---

<sup>92</sup> Wholesale Proceeding, TELUS Witness Panel Testimony, Hearing Transcript, Volume 7 at paras. 14054-14055.

<sup>93</sup> TELUS 1999 Annual Report at 31.

<sup>94</sup> TELUS 2000 Annual Report at 10.

<sup>95</sup> TELUS 2000 Annual Report at 14.

this objective was announced as \$200 million in 2001 and an additional \$300 million in 2002.<sup>96</sup>

126. In its 2002 annual report, TELUS indicated that it had largely completed its ADSL rollout, spending \$250 million of the planned \$300 million capital budget for the project.<sup>97</sup>
127. Also in 2002, TELUS indicated that it had launched an NGN project intended to support increased volumes of data transmissions, new applications like voice over IP (VoIP), bring a variety of next generation capabilities and services to both residential and business customers and eventually eliminate the need for separate networks for voice, data and video services. No specific dollar value was placed on this aspect of TELUS's NGN deployment efforts.
128. In its 2004 annual report, TELUS indicated that it had, to that time, invested \$800 million in its high speed Internet infrastructure.<sup>98</sup> More generally, with respect to its NGN infrastructure, TELUS stated that it:

... operationalized its next generation network (NGN) infrastructure, utilizing this core strategic asset for both circuit-switched voice and a significant portion of TELUS Mobility backhaul. As well, the TELUS IP-One suite of [small and medium business] services continues to be carried on this infrastructure. As a result, the NGN is evolving from a platform used solely for providing improved operational efficiency to one that is providing convergence at a differentiated application level. As new, IP-based managed services are conceived and operationalized, the NGN backbone will continue to provide efficient connectivity for the holistic TELUS applications infrastructure.<sup>99</sup>

---

<sup>96</sup> TELUS 2001 Annual Report at 19 – 20.

<sup>97</sup> TELUS 2002 Annual Report, Corporate Review at 18.

<sup>98</sup> TELUS 2004 Annual Report, Business Review at 14.

<sup>99</sup> TELUS 2004 Annual Report, Business Review at 45.

129. In 2005, together with the B.C. provincial government, TELUS announced an initiative to bring high-speed data and voice services to 119 rural B.C. communities by the end of 2006. TELUS stated that it would invest roughly \$110 million over four years to connect these communities to high-speed Internet and expand broadband services.<sup>100</sup>
130. In 2005, TELUS began deploying ADSL2+ broadband technology (a second generation ADSL technology enabling transmission speeds of up to 15 Mbps compared to 6 Mbps for ADSL).<sup>101</sup> As noted by TELUS, ADSL2+ technology takes advantage of TELUS's existing investments in its extended reach access "copper/fibre access infrastructure" improvement programs. No specific dollar amounts were provided by TELUS with respect to this initiative.
131. In 2006, TELUS indicated that it intended to invest a further \$600 million between 2007 and 2009 to enhance its broadband infrastructure, to improve its position in the high-speed Internet market and allow for the provision of high definition television services.<sup>102</sup> TELUS added in this respect that it is installing advanced Internet equipment in more than 7,000 sites across its network and running fibre optic cable closer to customers' homes and, thereby, allowing for potential Internet access speeds of 15 to 30 Mbps and beyond.
132. In its 2007 and 2008 annual reports, TELUS indicates that it was continuing to invest in the improvement of its broadband infrastructure, including the continued deployment of ADSL2+ and higher speed VDSL2 technologies (aimed at supporting the delivery of high definition television services).<sup>103</sup> As of 2007, TELUS begins to refer to this initiative as fibre-to-the-node or FTTN, although it also indicates that it is conducting field tests on fibre-to-the-home or FTTH technology.<sup>104</sup>
133. In sum, based on its annual reports, it appears that TELUS invested as much as \$1.5 billion in NGN or broadband access infrastructure (not including its national IP

---

<sup>100</sup> TELUS 2005 Annual Report, Financial Review at 21.

<sup>101</sup> TELUS 2005 Annual Report, Financial Review at 50.

<sup>102</sup> TELUS 2006 Annual Report, Financial Review, page 18.

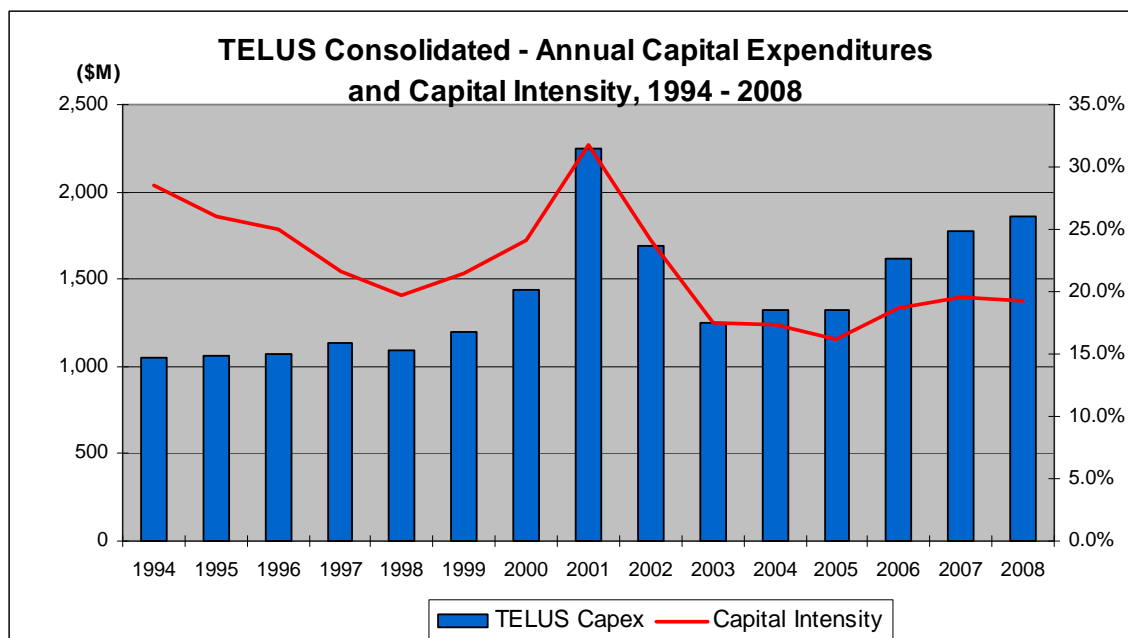
<sup>103</sup> TELUS 2007 Annual Report, Financial Review, pages 18 and 53.

<sup>104</sup> TELUS 2007 Annual Report, Financial Review, pages 53-54.

backbone facilities) over the last 10 years or so – i.e., \$800 million as of 2004, another \$110 for rural expansions starting in 2005 (in a joint venture with the government of B.C.) and, lastly, a further \$600 million spread over a three year period starting in 2006. This amounts to roughly \$150 million per year on average.

134. As can be seen from Table 2 below, TELUS's consolidated average annual capital expenditures on a consolidated basis amount to \$1.572 billion per year over the course of the last ten years. In the case of TELUS's wireline business segment, annual average capital expenditures on a consolidated basis amount to \$1.159 billion per year over the same period. Therefore, TELUS's investment in NGN or broadband access infrastructure amounts to roughly 10% of its total capex or 13% of its total wireline capex on an average annual basis.

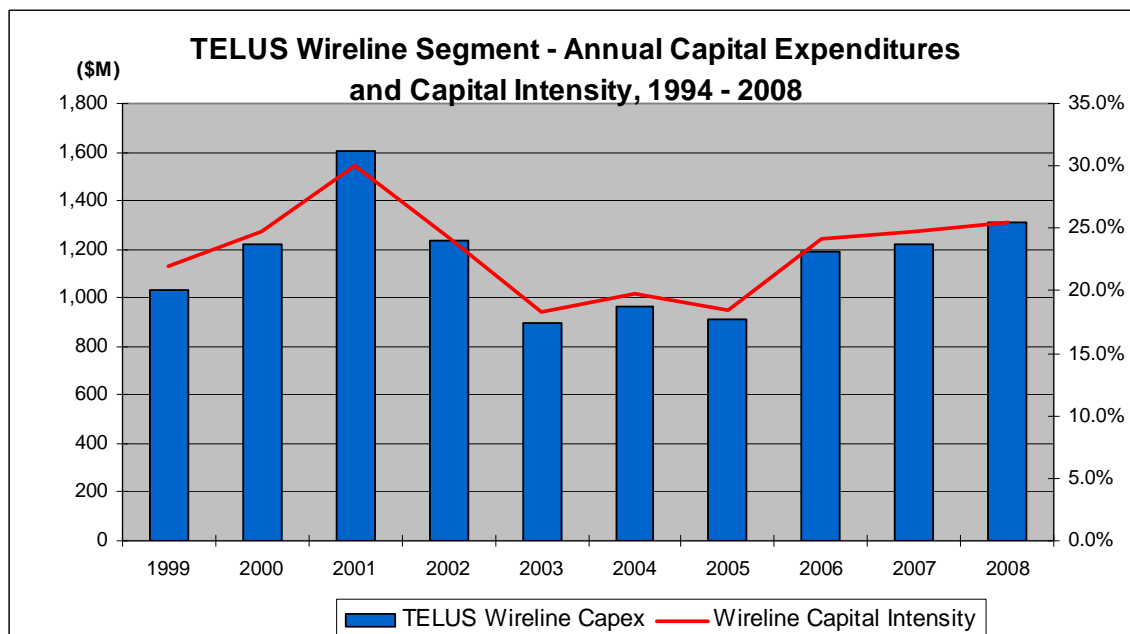
**Figure 6**



Source: *TELUS Annual Reports*



**Figure 7**



Source: TELUS Annual Reports

**TELUS Capital Expenditures and Capital Intensity  
 1994 - 2008**

Year	Consolidated			Wireline Segment		
	TOR (\$M)	Capex (\$M)	Capital Intensity	TOR (\$M)	Capex (\$M)	Capital Intensity
1994	3,672	1,048	28.5%	NA	NA	NA
1995	4,085	1,061	26.0%	NA	NA	NA
1996	4,301	1,076	25.0%	NA	NA	NA
1997	5,224	1,131	21.6%	NA	NA	NA
1998	5,560	1,093	19.7%	NA	NA	NA
1999	5,589	1,199	21.5%	4,700	1,034	22.0%
2000	5,998	1,443	24.1%	4,919	1,218	24.8%
2001	7,080	2,249	31.8%	5,360	1,606	30.0%
2002	7,007	1,693	24.2%	5,085	1,238	24.3%
2003	7,146	1,253	17.5%	4,881	893	18.3%
2004	7,581	1,319	17.4%	4,866	964	19.8%
2005	8,143	1,319	16.2%	4,938	914	18.5%
2006	8,681	1,618	18.6%	4,921	1,191	24.2%
2007	9,074	1,770	19.5%	4,924	1,219	24.8%
2008	9,653	1,859	19.3%	5,152	1,311	25.4%
99-08						

<b>AVG</b>	<b>7,595</b>	<b>1,572</b>	<b>20.7%</b>	<b>4,975</b>	<b>1,159</b>	<b>23.3%</b>
------------	--------------	--------------	--------------	--------------	--------------	--------------

*Source: TELUS Annual Reports (Financial Reviews) 1998 to 2008, which included consolidated and segmented results for TELUS. Note however that segmented results prior to 1999 are not readily available given that marks the year when TELUS and BC TELECOM merged. Clearnet was acquired by TELUS the following year, 2000.*

\* \* \* End of Document \* \* \*