PETITION TO HER EXCELLENCY THE GOVERNOR IN COUNCIL,

PURSUANT TO SECTION 12(1) OF THE *TELECOMMUNICATIONS ACT*

IN THE MATTER OF

TELECOM DECISION CRTC 2008-118, *MTS ALLSTREAM INC. – APPLICATION TO REVIEW AND VARY CERTAIN DETERMINATIONS IN TELECOM DECISION 2008-17 REGARDING THE CLASSIFICATION OF WHOLESALE ETHERNET SERVICES*

AND

TELECOM REGULATORY POLICY CRTC 2009-34, *REQUEST TO REVIEW AND VARY DIRECTIVES IN TELECOM DECISION 2008-10 RELATED TO THE PROVISION OF CENTRAL-OFFICE-BASED WHOLESALE ADSL ACCESS SERVICE AND AGGREGATED ADSL ACCESS SERVICE.*

MTS ALLSTREAM INC.

11 March 2009

The Government Must Reclaim its Agenda

1. MTS Allstream Inc. ("MTS Allstream") petitions the Governor in Council to vary Telecom Decision CRTC 2008-118[1] (the "Ethernet Decision") and Telecom Regulatory Policy CRTC 2009-34[2] (the "ADSL Decision") of the Canadian Radio-television and Telecommunications Commission (the "CRTC" or the "Commission") or, in the alternative, refer the Decisions back to the CRTC to modify the wholesale classification of Ethernet and asymmetric digital subscriber line ("ADSL") services.

2. In the Ethernet and ADSL Decisions, the Commission refused to mandate wholesale access for competitors, at cost-based rates, to digital subscriber line ("DSL") and "next-generation" digital telecommunications facilities ("Ethernet services") owned by the former monopoly telephone companies. MTS Allstream requests that the Government exercise its powers under section 12 of the *Telecommunications Act* to require that the Commission change its regulatory treatment of wholesale Ethernet and DSL facilities, thereby ensuring that Canadian consumers and businesses can reap the benefits of a fully competitive telecommunications market.

3. Now, more than ever, Canadian businesses must be competitive with their international counterparts. The availability, speed and pricing of cutting-edge telecommunications services are a key enabler of productivity, both directly and by facilitating higher adoption rates of information and communications technologies ("ICTs"). High-speed broadband in particular is a driver of economic growth: communities with broadband experience higher rates of growth in employment and in the growth of the number of businesses, both overall and in IT-intensive sectors.[3] A competitive market for advanced broadband services is a key enabler of e-commerce of all kinds, including supply chain management, online marketing and sales, automated inventory and logistics management systems, and automated data collection systems. It also enables the provision of sophisticated government and public sector initiatives, including, for example, distance education and e-health initiatives; transit smart cards such as those in use in London and Hong Kong (to be rolled out on Ontario's VIVA bus system beginning later this year); and online government services, including, for example, filing of tax returns online.

4. All of these transactions rely on the ability of businesses to access advanced telecommunications facilities and services at reasonable prices. But the CRTC's determinations in the Ethernet and ADSL Decisions run counter to this goal. Only government action will ensure that Canadian businesses of all sizes have competitive alternatives necessary to fill their business-critical telecommunications needs and thereby meet the challenge of ensuring Canada's economic success.

5. This Government has provided a road map towards a more competitive, efficient telecommunications industry, both by issuing a policy direction to the CRTC, and by itself implementing smart regulatory policy in the wireless sector. The auction for advanced wireless services (the "AWS Auction") is an example of an astute policy

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1 *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.

2 *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.

3 S. Gillett, W. H. Lehr, C. Osorio, M.A. Sibu, "Measuring the Economic Impact of Broadband Deployment", Final Report - Prepared for the U.S. Department of Commerce, Economic Development Administration, February 2006.

decision that enhanced investment and competition. Not only did the Government recognize 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 – given the comfortable oligopoly that existed in the wireless market – but the Government 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, to the benefit of all Canadians. The Government has also recognized that "hybrid" telecommunications service providers ("TSPs") – those who lease essential components of other parties' networks (usually those of the former monopolies), and combine them with elements of their own networks – are fundamental to ensuring that Canadians have a healthy choice of competitive providers.

6. Despite the road map provided by this Government, the CRTC has lost its way. At a time when public policy should support and encourage competition, innovation and productivity, the CRTC has refused to remove the roadblocks to full and fair competition in the provision of broadband services. Indeed, in so doing the CRTC reversed its own earlier decision in which it had found that to deny competitors wholesale access to broadband facilities would effectively allow the largest incumbent telephone companies to give themselves an undue preference in the retail provision of these services. By reversing itself, the CRTC has eschewed the Government's example of smart regulation in favour of deregulation at all costs. But the relative strength of Canada's banking system and the much-applauded example of the AWS auction have shown us that complete deregulation is not always the answer.

7. Although it had ordered mandated access to the Ethernet facilities in question in 2007, in the Ethernet Decision, the CRTC upheld its new wholesale policy denying mandated access at reasonable, cost-based rates, to "next-generation" communications facilities. This policy is rooted in the outdated and failed notion that the way to encourage investment is to permit incumbents with a dominant market share to charge competitors monopolistic rates for access. Worse still, the CRTC's Ethernet Decision was based on an erroneous application of its own test for where access to a facility should be mandated (the "essential facility test") and a lack of evidentiary foundation for its conclusion that the facilities in question are "duplicable" by MTS Allstream and other competitors.

8. MTS Allstream has and continues to invest in network infrastructure where there is a business case to do so, however, MTS Allstream would have to spend billions to duplicate existing local networks in Toronto and other major Canadian cities, just to serve the customers it already has, let alone to compete for new ones. It is impossible for this to happen: indeed, in the Ethernet Decision, the CRTC itself has recognized that end-to-end duplication of existing facilities is not a reasonable goal.[4]

9. In the ADSL Decision, although the Commission recognized that MTS Allstream and other competitors have for many years been overcharged for DSL access and receive poor quality of service for those facilities and services – parts of which can only be provided by the former monopolies – it refused to require that these services be provided at cost-based rates. Rather, it determined that it would initiate yet another proceeding to

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[4] Ethernet Decision, para. 17.

look at unbundling the access and transport elements of the former monopolies' gateway and high-speed access services, thereby perpetuating the status quo and delaying meaningful competition.

10. Permitting the former monopolies to charge MTS Allstream monopolistic rates for access to their facilities will only serve to limit the rational investments we and other competitors would otherwise make to enhance choice, innovation and pricing of these critical services to Canadian businesses. Since telecommunications technology and networks are evolving from TDM-based networks to "next generation" IP-based networks, it is only rational for competitors to invest in IP infrastructure. Indeed MTS Allstream was the first carrier in Canada to have a full IP backbone network. However, the imminent withdrawal of Ethernet services – the access architecture for IP or broadband business services - has the consequence of discouraging further investment as, if the CRTC decisions are not reversed, this investment will ultimately be stranded.

11. Moreover, if the CRTC is permitted to follow the same deregulatory agenda as that followed for the past number of years by the Federal Communications Commission ("FCC") in the U.S., a comparative analysis of the macroeconomic effects shows that the cost to the Canadian economy could be the loss of over 21,000 jobs across all sectors of the economy, and lost opportunity for GDP growth in the range of $6 billion. Accordingly, the Government must be prepared to step in, as it has done in other instances where the CRTC has persisted in a policy that will limit competition and impede economic growth, and reclaim its agenda and policy for all Canadians.

12. By varying or referring back to the CRTC the Ethernet and ADSL Decisions the Government has an opportunity to remove a significant roadblock to competition and enact a major stimulus package, for small and medium-sized businesses ("SMBs") in particular, all at no cost to the taxpayer. Cost-effective and workable Ethernet access will provide both the ability and incentive for competitors in the telecommunications market to create innovative new services; more competition in the market will drive down prices and create more flexible service offerings; and because telecommunications is an enormous enabler in the knowledge economy, businesses will take advantage of these lower prices and new services to create new and innovative products and services themselves.

13. In the AWS auction, enlightened Government policy opened the doors for competition and welcomed at least four new entrants who successfully bid for significant amounts of spectrum while realizing auction proceeds of over $4 billion – almost three times what had been predicted. In making that decision, this Government did not permit itself to be influenced by the incumbents' self-serving arguments that setting aside spectrum for new wireless entrants would subsidize their entry plans and lead to lower investment. The incumbents will doubtless make similar arguments that granting access to Ethernet facilities on reasonable terms and conditions will limit the incentives of competitors or themselves to invest. But, as detailed in the attached reports about the American and British telecommunications markets and discussed later in this Petition, international experience shows quite the opposite: carefully tailored regulation that provides cost-based access to leading-edge telecommunications facilities does not deter investment, nor does deregulation of those selfsame facilities necessarily incent investment on the part of the former monopoly providers. Rather, regulating where necessary on a wholesale level, as has been done in the United Kingdom, enables competitive market forces to bring the benefits of price and innovation to consumers and businesses in a deregulated retail environment.

14. Finally, it is important to note that while high speed broadband services that rely on Ethernet facilities are typically called "next generation", this nomenclature is deceptive. Ethernet facilities are not something that will be needed down the road at some vague point in time: they are already or are rapidly becoming the industry standard, and are a critical enabler of sophisticated broadband applications for both businesses and consumers now and for the foreseeable future. Legacy facilities to which competitors do have access are gradually becoming obsolete. Accordingly, if the Government wants to put the telecommunications industry in Canada back on the right track, it must act today so that the benefits of high-speed Internet can be enjoyed and exploited to their fullest by this generation of Canadian consumers and businesses.

The Telecommunications Market in Canada

15. Competition in the provision of high speed broadband services for the business market has been limited, despite the fact that affordable broadband is a crucial input to stimulate Canada's economic growth and prosperity.

16. For over 100 years, telecommunications in Canada was provided by a system of regional monopolies, each of which built extensive infrastructure under a system that guaranteed returns. Beginning in 1992 with the decision by the CRTC to open the long-distance market to competition, the telecommunications sector has gradually been liberalized. Today, the former monopoly providers or their descendants (Bell Canada ("Bell"), Bell Aliant, MTS Allstream, Saskatchewan Telecommunications ("SaskTel") and TELUS Communications Co. ("TELUS")) continue to serve their historic operating territories, but have also expanded in some cases to compete out-of-territory. Although competition in the long distance market has been largely successful, new entrant competitors have struggled to establish a foothold in the markets for local telephony and for high speed Internet services, largely due to high barriers to entry, including the capital expense of self-supplying facilities, difficulties gaining access to rights of way and buildings, and painstakingly slow unbundling of the incumbents' facilities at cost-effective rates.

17. Canadian cable television providers built a near-ubiquitous infrastructure among residential households in the country over the last 35 years.[5] The cable companies recognized the potential market for Internet access at an early point, and invested heavily in updating their networks to support two-way communications and digital access.[6] However, while the cable companies have emerged as the leading competitors to the former monopolies in the provision of voice and high-speed Internet services in the *residential* market, they have provided much less competition in the *business* market, outside of the small home office segment.[7] Indeed, as detailed in the

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[5] This was assisted by broadcasting policies that, until 1997, granted the cable companies territorial monopolies. Deregulation of cable was prompted by the rise of direct-to-home satellite technology as an alternative broadcasting delivery system in 1997: see Public Notice CRTC 1997-25, *New Regulatory Framework For Broadcasting Distribution Undertakings*, 11 March 1997.

[6] Between 1998 to 2002, Canadian cable providers spent $5 billion in infrastructure improvements: Canadian Cable Television Association presentation to Minister of Industry, "Achieving Excellence: Investing in People, Knowledge and Opportunity. Canada's Innovation Strategy - Comments of the Canadian Cable Television Association," September 2002, available online at http://innovation.gc.ca/gol/innovation/site.nsf/en/in02268.html.

[7] According to the CRTC Communications Report 2008, cable companies held 54% of the residential Internet access revenues in Canada but only 18% of the business revenues. Much of that 18% is likely attributable

Lemay-Yates Associates Inc. Report (the "LYA Report") attached as Appendix 4, the cable companies are pulling back even further from the business market as they focus on leveraging their current residential footprint.[8]

18. Resellers and utility telcos offer high-speed broadband services, but represent a minor share of the business market. Many of these companies focus on governmental and public sector customers and their revenues remain modest; indeed, as noted in the LYA Report, in the last few years many utilities have chosen to sell their telecommunications affiliates.[9] Thus, the market impact of utility telecommunications companies has been small and offers little in the way of competitive relief to business customers.

19. It is clear that the business broadband market is currently underserved. Customers have few choices of competitive providers, and are thus forced to rely heavily on the former monopolies, who can charge high prices for speeds that are not keeping pace with our international counterparts. A fully competitive market will bring innovation, more choice, higher speeds and lower prices to Canada's business customers, with corresponding benefits to the Canadian economy.

The Record, the Reasons, and the Remedy

MTS Allstream and its record of investment

20. MTS Allstream is a strong proponent of competition in the telecommunications sector. Indeed, MTS Allstream is, in many respects, "the" voice of competition in Canadian telecommunications. We offer a unique perspective because we operate as both an incumbent in Manitoba and a competitive provider across the rest of Canada. We are the largest facilities- based competitor serving the business market in Canada, with almost 50% of the business lines served by former monopolies competing out-of-territory.

21. MTS Allstream has a long history of delivering competition and innovation in telecommunications markets. Our Enterprise Solutions Division (which operates under the Allstream brand nationally and under the MTS brand in Manitoba) offers business customers a portfolio of solutions for medium and large businesses, including Internet protocol-based communications, voice and data connectivity services. We also offer services targeted at small business across Canada through the Consumer Markets Division under the Allstream brand. The Consumer Markets division leads every telecommunications market segment in Manitoba, delivering a full suite of next generation wireless, high-speed Internet and data, digital television and wireline voice services under the MTS brand.

22. MTS Allstream has invested more than $2.5 billion in competitive network infrastructure into the Canadian telecommunications market since 2001 alone, giving it the most extensive national competitive network in Canada. Spanning 27,900 km from coast to coast, the network is equipped with the latest digital switching technologies, and provides global connections through strategic partnerships with service providers in more than 70 countries. As various aspects of the telecommunications market have

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to Rogers Business Solutions, which acquired the business telecommunications operations of Call Net in 2005.

[8] The Lemay-Yates Associates Inc. Report ("LYA Report"), pages 21-30.

[9] LYA Report, page 32.

been opened to competitive entry over the last fifteen years, we have moved to make capital investments in each area. Thus, over the years, MTS Allstream has built a national backbone network which it has upgraded and developed over the past seven years to deliver advanced, IP-based services to medium-to-large as well as the relatively underserved SMB market. In major metropolitan markets,[10] we have established a metropolitan point of presence ("POP") and deployed a fibre ring around the metropolitan area. We have built fibre rings around the city cores as well, and, depending on the services being offered, we may invest in co-location spaces within the central offices ("COs") of the former monopolies. The provision of Ethernet services requires building Ethernet transport facilities (which take aggregated traffic from the COs and send it outward into the network), placing Ethernet connecting links in the COs of the incumbents, and building local access facilities to deliver traffic from the COs to individual premises.

23. Each of these steps is accomplished once customer demand is sufficient to warrant the next phase of investment. But until that point has been reached, MTS Allstream will lease various of these services from the incumbents or third party providers, where possible. Typically, for example, after building a fibre ring around the city core and creating a POP, MTS Allstream will lease end-to-end Ethernet access and transport services to send traffic from its POP to end customer premises. Once demand has grown so as to justify the investment, MTS Allstream would invest in Ethernet transport facilities, leasing only the CO connecting link and access portions. The next step is to deploy an Ethernet switch within its existing co-location space in a CO. Finally, again where a business case is made, MTS Allstream would self-supply the "last-mile" access portion to the customer premises. (See Figure 1).

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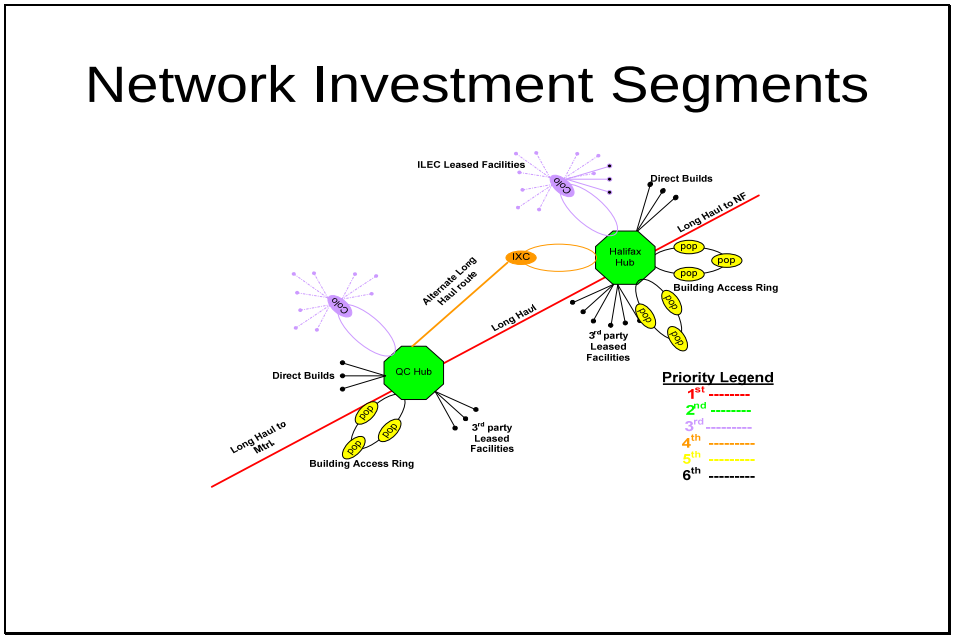
[10] To date, outside of Manitoba, metropolitan POPs and fibre rings have been established in Vancouver, Calgary, Ottawa, Toronto and Montreal.

Figure 1



24. While full duplication of the existing network owned by the former monopolies is neither attainable nor desirable, in an ideal world, each of these components (in particular Ethernet transport, access and connecting link facilities) would be made available for lease at cost-based rates on an unbundled (i.e. individual) basis, so that MTS Allstream and other competitors can gradually self-supply more and more of their own facilities as demand grows. However, as described in more detail in this Petition, such facilities are not currently made available by the former monopolies on an unbundled basis in a workable manner; rather, Ethernet is offered only on an "end-to-end" basis, i.e. as a full service that includes transport, switching and access. MTS Allstream has in fact invested in components such as Ethernet switches and transport facilities in anticipation of unbundling – but in light of the Commission's reversal of its own decision granting unbundled access to Ethernet components, these self-supplied facilities cannot currently be used in combination with a former monopoly's network. The unavailability of unbundled Ethernet elements leads to the absurd result whereby such investment is stranded and deterred, rather than encouraged.

MTS Allstream's Record of Innovation

"Innovation [is] a process through which economic or social value is extracted from knowledge – through the creation, diffusion, and transformation of knowledge to produce new or significantly improved products or processes that are put to use by society."[11]

25. MTS Allstream is clearly committed to investing in the provision of advanced telecommunications facilities in Canada. Indeed, we are the only former monopoly provider that derives more than half its revenue from competing outside its former monopoly region and is therefore, by its very profile, committed to a regime that spurs

11 Conference Board of Canada, "How Canada Performs: A Report Card on Canada" (2008).

competitive market forces. But it bears noting that there is, and will only ever be, one ubiquitous network in Canada: the former monopoly network, which was paid for by Canadians during more than a century of monopoly rule. The CRTC itself has recognized that end-to-end duplication of the former monopoly networks is not a realistic goal. As a fundamental proposition, this network is therefore a public network that should be accessible at cost-efficient rates to those competitive providers who can use it to deliver new, innovative, and competitive services to Canadian consumers and businesses.

26. Entrants in the telecommunications sector are ideally positioned to serve the needs of innovative Canadian businesses attempting to use ICTs to their competitive advantage. Like their customers, competitors too must innovate in order to find ways to differentiate their products and services from those of the established incumbents. Moreover, they are ready and willing – indeed, they have an imperative – to produce specially designed products and services to meet existing and emerging markets, or to meet demand that is not adequately served by the former monopolies. By working hand in hand with innovative Canadian businesses, competitors enhance performance and become enablers of innovation throughout the economy.

27. MTS Allstream understands this dynamic first-hand. Our competitive arm, Allstream, was the first company in Canada to launch a 56 kilobytes per second ("kbps") Internet Dial-up service targeted at SMBs and professional users. The company was able to do this because it had deployed 100% digital modems and telephone lines leased from the former monopolies. Allstream was also the first Internet Service Provider ("ISP") to offer long distance service with its Internet access service. The long distance service provided online ordering, billing and daily usage statistics, years before the former monopolies offered this capability.

28. Similarly, MTS Allstream has become both a technology leader and an enabler in Network Hosted Services. In 2005, we launched the Allstream Collaboration Suite, enabling SMBs to collaborate with communities of interest. The service works with the former monopolies' broadband ADSL access services to provide email, audio and video conferencing, document sharing and wireless integration, all over a secure network infrastructure. More recently, MTS Allstream pioneered its multi-protocol label switching ("MPLS") network – a network architecture that allows more converged services to be delivered to customers, meeting in particular the needs of SMBs.[12]

The Right Reasons: Driving Canada's Economic Growth

"The primary drivers of productivity growth are the investment, innovation and adaptation fostered by openness and competition."[13]

29. It is well-recognized that advanced telecommunications networks and services are a key enabler of productivity and economic growth.[14] In today's economy, the competitive edge belongs to those countries at the forefront of ideas and innovation.

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[12] MPLS stands for Multi-protocol Label Switching, and is an advanced technology that simplifies and improves the transmission of Internet protocol-based packets. It provides network operators with more flexibility to divert and route traffic around link failures, congestion, and bottlenecks, and allows for better identification of information so as to divert and route traffic according to the type of data being carried (e.g. voice or video).

[13] Competition Policy Review Panel, "Compete to Win", June 2008 at 4.

30. Innovation, and with it, productivity, increasingly relies on advanced ICTs, which in turn are directly reliant on an advanced telecommunications infrastructure. A leading-edge communications sector is therefore an enabler of ideas, knowledge, opportunities and productivity on the part of Canadian companies of all sizes and across all industries. This has been recognized by a number of sources, including the National Broadband Task Force, which recommended to the Federal Government that it encourage Canadian ICT firms, particularly SMBs, "to develop innovative broadband applications, focusing particularly in the areas of e-learning, e-health and e-business."[15]

31. Canadian SMBs are a huge force for growth in our economy: they represent over 99% of all firms in Canada, 48% of the labour force in the private sector, and approximately 22% of the country's gross domestic product.[16] But SMBs require access to state-of-the-art broadband and digital technology to grow and prosper in a fiercely competitive international marketplace. A survey conducted by the Canadian Federation of Independent Business last year found that 91% of SMBs use high-speed Internet, but fully 44% said there is not enough competition and choice in the market for them to obtain the best value for money for the services they utilize, and 40% reported being somewhat or very dissatisfied with the pricing of Internet services.[17] Unsurprisingly, rural-based firms are more dissatisfied with competitive options than urban firms.[18]

32. Although large and very large businesses are generally better served, they also suffer from lack of choice and high prices. A recent example is the difficulty that the Government of Canada experienced in attempting to transition part of its network (for the Department of National Defence) from Bell to TELUS. As discussed in more detail later in this Petition, when the transition period ran beyond what had originally been anticipated, Bell attempted to impose rate increases and other terms that the customer complained were far in excess of what was just and reasonable. This example points to the ease with which a former monopoly can abuse its position. Bell, which is dominant in the provision of access services in its territory, has a natural incentive to make it difficult, if not impossible, for any customer to move to a competitor. Since Bell is the only party able to provide the services at issue, the Government was at Bell's mercy during the transition period. Indeed, TELUS was also at Bell's mercy during this time since it was forced to rely to a certain extent on Bell's wholesale facilities, services, and staff to effect the transition. This is but one example of the difficulties faced by large companies who may have complex telecommunications needs and few competitive alternatives.

33. A competitive market for advanced broadband services is a key enabler of e-commerce of all kinds, including supply chain management, online marketing and sales, automated inventory and logistics management systems, and automated data collection systems. It also enables the provision of sophisticated government and public sector initiatives,

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[14] See, for example, Waverman, Meschi and Fuss, "The Impact of Telecoms on Economic Growth in Developing Countries" (2005)*;* Madden and Savage, "Telecommunications productivity, catch-up and innovation" (1999); Correa, "The Economic Impact of Telecommunications Diffusion on UK Productivity Growth" (2003).

[15] Report of the National Broadband Task Force, "Networking the National Dream" at 7.

[16] Compete to Win at 74.

[17] CFIB, "Answering the Call: SME's Perspectives on Competition in the Canadian Telecommunications Industry", March 2008.

[18] CFIB, "Answering the Call: SME's Perspectives on Competition in the Canadian Telecommunications Industry", March 2008.

including, for example, distance education and e-health initiatives; transit smart cards such as those in use in London and Hong Kong (to be rolled out on Ontario's VIVA bus system beginning later this year); and online government services, including, for example, the federal government's move to allow the filing of taxes online. But only a vigorously competitive telecommunications sector can ensure that businesses of all sizes are able to obtain the choice, pricing and innovation they require in their critical telecommunications services. And such a vigorously competitive sector requires that where facilities and services cannot be economically duplicated by competitors, cost-based rates for such facilities and services should be offered by the former monopoly providers. As detailed later in this Petition, price increases as a result of a lack of competition has had detrimental results for the U.S. economy as a whole, including the loss of hundreds of thousands of jobs and billions in lost GDP growth. While Canada's telecommunications sector has, to date, experienced proportionately greater growth and capital investment than its southern neighbour, this is likely due to the regulation of wholesale services in Canada that has existed up to now, while such regulation was being dismantled during the corresponding period in the U.S. To dispense with such regulation in the face of the U.S. experience would be folly.

34. The DSL services at issue in the ADSL Decision allow for the provision of high-speed Internet, generally using the copper / fibre facilities of the former monopolies. The Ethernet services that are the subject of this Petition are advanced digital telecommunications facilities capable of transmitting data at far greater speeds. Ethernet is now or is rapidly becoming the industry standard for most of the developed world. Ethernet facilities are essential to the provision of high-speed broadband and advanced ICTs, which are critical to the development of the knowledge economy. Customers, including SMBs, are now specifically demanding Ethernet solutions.

35. In order to maintain their competitive edge, Canadian SMBs require access to these advanced services at rates and other terms and conditions that are themselves competitive with those available internationally. This requires that these business customers have a choice of suppliers. Unfortunately, the Ethernet Decision serves to restrict choice and dampen competition, not promote it. By denying MTS Allstream's request to mandate reasonable, cost-based access by competitors to both ADSL and Ethernet facilities owned by the largest former monopolies, the CRTC simply reinforces the market power of those few companies which still hold the lion's share of the business market in Canada.[19] Moreover, by denying mandated access to these facilities, the Commission has permitted the former monopolies to dictate the technology, as well as the prices and other terms and conditions, on which other providers can serve the business market. Competitors are forced to choose between serving customers on the outdated technology that is made available by former monopolies, or paying exorbitant rates to lease advanced former monopoly facilities that were built with the support of their dominant market share and ubiquitous presence, all while receiving inferior service. This is a recipe for competition to fail.

36. Unless the ADSL and Ethernet Decisions are altered, business customers will have no genuine choice of providers for their business-critical broadband services, and will be forced to pay higher and higher prices charged by the former monopolies for essential

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[19] Former monopolies hold between about 70 and 85% of revenues in the various business market segments: CRTC Communications Monitoring Report 2008, pages 197, 202, 210, 222.

telecommunications services that should be helping them innovate and invest. SMBs in particular will be powerless and will see their costs rise. Innovation will be dampened, and Canada's economic competitiveness will be the loser.

37. Varying the ADSL and Ethernet Decision to mandate competitors' access to DSL and Ethernet facilities at reasonable, cost-based rates, on the other hand, will enable economic growth, ensure that the former monopolies compete on a fair basis for market share with other providers, and keep prices competitive for businesses of all sizes.

The Right Reasons: Government Policy Encourages Competition

"Canada's New Government will: ...Take further steps to ensure that Canadians can benefit more fully from increased competition in the telecommunications sector, while preserving safeguards against anti-competitive behaviour that could hurt consumers."[20]

38. Over the last few years, this Government has provided a road map towards a more competitive, efficient telecommunications industry.

39. In 2006, it issued a policy direction to the CRTC[21] (the "Policy Direction") in which it directed the Commission to:

> (i) rely on market forces to the maximum extent feasible as the means of achieving the telecommunications policy objectives, and
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> (ii) when relying on regulation, use measures that are efficient and proportionate to their purpose and that interfere with the operation of competitive market forces to the minimum extent necessary to meet the policy objectives

40. Significantly, it also directed the Commission to review its framework for wholesale services and, in doing so, to take into account the potential for incumbents to exercise market power in the absence of mandated access to wholesale facilities:

> (ii) with a view to increasing incentives for innovation and investment in and construction of competing telecommunications network facilities, to complete a review of its regulatory framework regarding mandated access to wholesale services, to determine the extent to which mandated access to wholesale services that are not essential services should be phased out and to determine the appropriate pricing of mandated services, which review should take into account the principles of technological and competitive neutrality, 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 (emphasis added)

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[20] Department of Finance, "Advantage Canada: Building a Strong Economy for Canadians" (2006), page 81.

[21] SOR/2006-355, Order Issuing a Direction to the CRTC on Implementing the Canadian Telecommunications Policy Objectives.

41. The Policy Direction calls for smart regulation; it does not mandate deregulation where such deregulation would in fact impede the development of competition. This Government has shown that it is aware of this crucial distinction, most recently in the AWS Auction.

42. In that case, the Government recognized that Canada's wireless industry was in dire need of more competition in order to produce benefits for consumers. Accordingly, it determined that it was in the public interest to set aside spectrum for new entrants 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."[22] 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.[23] (emphasis added)

43. In its wisdom, the Government required not simply that spectrum be set aside for new entrants, but also mandated roaming as well as antenna tower and site sharing. MTS Allstream has faced numerous problems in attempting to negotiate roaming agreements with TELUS and agrees with the Government's conclusion that mandated roaming is important and meets the policy objectives of the Telecommunications Act.[24] The Government learned the importance of a technology-neutral approach from its experience with Microcell, a PCS new entrant that was effectively forced out of the market when it was unable to conclude agreements for roaming on the digital networks of the three largest wireless carriers. In 1995, the Government had imposed conditions of licence requiring existing providers to provide roaming, but only on their analog networks.[25] Without the ability to access the digital networks built by those existing providers, there was simply no way for Microcell to compete with incumbent providers which had already built out their networks. Likewise, if entrants in the broadband market cannot sustain their presence because they only have access to the legacy facilities of the former monopolies, then they will be forced to exit the market, taking any prospect of competitive market forces with them.

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22 Industry Canada, *Policy Framework for the Auction for Spectrum Licences for Advanced Wireless Services and other Spectrum in the 2 GHz Range*, November 2007, page 4.

23 Industry Canada, *Policy Framework for the Auction for Spectrum Licences for Advanced Wireless Services and other Spectrum in the 2 GHz Range*, November 2007, page 3.

24 Industry Canada, *Policy Framework for the Auction for Spectrum Licences for Advanced Wireless Services and other Spectrum in the 2 GHz Range*, November 2007, page 8.

25 See http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf09071.html.

44. In mandating antenna tower and site sharing (and prohibiting exclusive site arrangements), the Government noted "The reports of the Telecom Panel and the National Antenna Tower Policy Review indicate that there are compelling social and economic reasons to mandate antenna tower and site sharing. These reasons include dealing with antenna tower proliferation and local concerns as well as how these facilities can be used as barriers to entry and competition."[26]

45. Put simply, in the AWS Auction the Government recognized that regulation was required to foster competition where market forces are insufficient, and that it made sense to mandate sharing of facilities rather than force competitors to engage in unnecessary duplication or costly access measures that would inevitably be detrimental to consumers. As is detailed below, this is precisely the case with Ethernet services.

46. Despite this road map however, which clearly shows that the Government's policy is to foster competition rather than to pursue deregulation at all costs, the CRTC has lost its way. The issue lies not with the Policy Direction itself, which clearly mandates reliance on market forces when feasible and reliance on efficient regulation when market forces are not feasible, but rather with the Commission's interpretation of the Policy Direction, which confuses smart regulation with deregulation. The Ethernet and ADSL Decisions are the latest manifestation of the Commission's penchant for deregulation even in cases where evidence is clear that reliance on market forces alone will not promote competition. The collapse of the banking system in the U.S. has shown that deregulation is not necessarily a road to a healthy economy; and the success of the AWS auction has shown us that carefully tailored regulation can reap enormous benefits for Canada.

47. At a time when public policy should support and encourage competition, innovation and productivity, the CRTC has refused to remove a roadblock to full and fair competition in the provision of broadband services and advanced ICTs, thereby favouring the interests of the largest telephone companies over the public interest. The consequences of this decision will be particularly adverse for SMBs – the engine of economic growth – and fly in the face of the competitive market that Government policy has sought to foster.

The Wrong Reasons: Where the CRTC Erred

48. Despite a ruling mandating access to Ethernet facilities barely more than a year earlier, in Telecom Decision 2008-17 (the "Wholesale Decision"), the CRTC denied mandated access, at reasonable, cost-based rates, to both DSL and "next-generation" communications facilities, including Ethernet facilities. This policy is rooted in the outdated and failed notion that the way to encourage investment is to permit incumbents with a dominant market share to charge competitors monopolistic rates for access.

The ADSL Decision

49. In the ADSL Decision, the CRTC denied MTS Allstream's request to have wholesale DSL services which are currently mandated but priced at rates that include mark-ups of upwards of 50%, reclassified as essential and priced at cost plus 15%. At the same

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[26] Industry Canada, *Policy Framework for the Auction for Spectrum Licences for Advanced Wireless Services and other Spectrum in the 2 GHz Range*, November 2007, page 9.

time, the CRTC approved Bell's request to eliminate the essential ADSL access service, leaving competitors without any cost-based access to any element of competitor DSL, even though the Commission has acknowledged that certain elements (e.g., copper access from remotes and CO links) can only be provided by the former monopolies.

50. Although the CRTC recognized that MTS Allstream and other competitors have long expressed a need for properly configured and priced CO-based ADSL access service and that they have long sought an ADSL solution for customers served from remotes, it denied MTS Allstream's request. The CRTC claimed that the Bell and TELUS gateway access service and high-speed access services could not be considered essential because these services included a transport element and, in the CRTC's view, transport was "duplicable" by competitors.

51. The CRTC recognized that issues regarding the appropriate configuration, classification, and feasibility of an unbundled ADSL access service for competitor use need to be resolved. However, rather than doing so, it commenced a new proceeding, thereby perpetuating the existing situation which the CRTC itself acknowledged had been unresolved since 2002. This will further delay competition and encourage price increases to Canadian carriers and businesses that rely on their services.

The Ethernet Decision

52. As detailed below, the CRTC's recent persistent refusals to mandate access to Ethernet facilities is based on an erroneous application of its own essential facility test and a lack of foundation for its conclusion that the facilities in question are "duplicable" by MTS Allstream.

History of regulation of Ethernet services

53. Competitors have historically been either denied access to Ethernet services altogether from the former monopolies, or have been charged retail rates for most of these services without receiving the same level of service as the former monopoly's retail customers. This makes it effectively impossible for them to compete in the market and paves the way for the large former monopolies to give themselves an undue preference in the provision of these services.

54. In Telecom Order 2007-20 (the "Order") the Commission concluded an intensive, five-year process respecting the provision of Ethernet services, including the collection of an enormous body of evidence.[27] In its 50-page ruling, the Commission ordered former monopolies to unbundle the components of their Ethernet service and revised the former monopoly tariffs for these components such that competitors would finally have mandated, wholesale access to facilities at cost-efficient rates, thus opening the door to a lively competitive market at last.

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[27] 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 March 15, 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.

55. In the Order, the Commission found that constraints faced by competitors, and the widespread deployment of former monopolies' fibre facilities relative to competitors, as well as the lack of adequate substitutes for Ethernet service, led to the conclusion that "in the absence of a competitor Ethernet access service, Bell Canada, MTS Allstream, SaskTel, and TCC [TELUS] are unduly preferring themselves in the provision of retail Ethernet access services."[28] (emphasis added)

56. However, in the wake of the Order, Bell and TELUS filed applications requesting that the Commission delay implementation of the Order until after the release of the Wholesale Decision. The Commission granted those applications, which led to a further delay of over two years. Indeed, since the Commission has not revisited the Order since the Wholesale Decision, it is now seven years since competitors first sought cost-based access to Ethernet services and have been unable to achieve it. Thus, despite the Order, the CRTC's ensuing decision to delay its implementation has continued to preclude any effective competition for Ethernet services at all.

The Error Made by the CRTC

57. In the Wholesale Decision, the Commission reviewed 60 wholesale services and facilities,[29] and revised its definition of an "essential service". Ultimately, the Commission determined whether each of the wholesale services it considered would continue to be mandated and what the appropriate pricing applicable to such services would be. In the case of Ethernet services, it found that they should be classified as non-essential and subject to phase out, meaning that after a fixed period of time, the largest former monopolies could dictate the rates at which they would offer these services to competitors or even deny them access outright.

58. In the Wholesale Decision, the Commission held that to be essential, a facility, function, or service must satisfy all of the following conditions:

> (i) The facility is required as an input by competitors to provide telecommunications services in a relevant downstream market;
>
> (ii) The facility is controlled by a firm that possesses upstream market power such that withdrawing mandated access to the facility would likely result in a substantial lessening or prevention of competition in the relevant downstream market; and
>
> (iii) It is not practical or feasible for competitors to duplicate the functionality of the facility.[30]

59. Because it found that competitors have duplicated former monopoly Ethernet access and transport networks, the CRTC concluded that Ethernet services were duplicable and therefore failed to meet the third prong of the test.

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28 Order, para. 80.

29 i.e. those telecommunications services and facilities supplied by the incumbent telephone and cable companies to third party providers of telecommunications services ("TSPs"), which are then used by these TSPs to provide services to retail customers, often in competition with the former monopolies and cable companies.

30 Wholesale Decision at para. 36.

60. MTS Allstream believes that the Commission clearly misapplied the test for when it should mandate access to a wholesale services to Ethernet services, and based its ruling on an erroneous interpretation of the evidence, as well as a misapplication of the Government's Policy Direction. It therefore applied to the CRTC to review and vary the Wholesale Decision.

61. In the Ethernet Decision, the Commission rejected MTS Allstream's application to review and vary the Wholesale Decision. It did so entirely on the basis that in its view, Ethernet services met the first two branches of its essential facilities test, but failed the third.

62. MTS Allstream submits that this was a flawed conclusion based on faulty and incomplete evidence.

63. In the Wholesale Decision, the Commission had concluded that Ethernet facilities were not essential. This conclusion was based on data that the Commission had requested and received in that proceeding respecting the facilities used by TSPs to provide Ethernet services. In upholding this conclusion in the Ethernet Decision, the Commission asserted that there was no doubt about the accuracy or reliability of this data. However, a brief review of just what data the Commission requested in the proceeding leading up to the Wholesale Decision (the "Wholesale Proceeding") and how it drew its conclusions, reveals an unsupported leap of logic.

64. The Commission issued an interrogatory in July of 2007 in which it asked each TSP to provide a breakdown between those transmission facilities it self-provisions, those it obtains from a third-party supplier, and those it leases from a former monopoly. It asked for this data disaggregated by the type of transmission facility (e.g. DS-0, DS-1, OC-12, Ethernet, etc.). Significantly, however, it did not ask for the actual number of circuits in each category, but only for the percentage in each case. It also omitted to collect data for former monopoly facilities in their home serving territories, which would have served as a useful basis for comparison between the scale of the facilities owned by the former monopolies and those of competitors. A copy of the Commission's interrogatory is attached to this Petition as Appendix A.

65. Based on the percentages supplied, the CRTC concluded that "Ethernet access and transport networks have been duplicated by competitors" and that therefore, these services did not meet the test for essentiality.

66. This data, and the ensuing conclusion, is faulty for two reasons.

67. First, by looking only at percentages, there was no way for the CRTC to understand either the absolute number or significance of circuits constructed by each TSP. For example, the evidence could show that a competitor is self-provisioning 100% of its Ethernet circuits in, say, a particular metro area. But the competitor may only have a total of one hundred circuits, while the former monopoly may have tens or even hundreds of thousands in this same area. Therefore the evidence relied on by the Commission tells one nothing regarding the feasibility of competitors duplicating this facility on any scale, let alone duplication meeting the Commission's own requirement, expressed in the Wholesale Decision, that "a facility must be duplicable <u>on a sufficient scale</u> to limit an former monopoly's ability to use any upstream market power"[31]

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[31] Wholesale Decision, para. 38.

(emphasis added). In essence, the Commission relied on the logical fallacy that being able to duplicate one means being able to duplicate all. The Commission also thereby assumed away any ability of the former monopolies to use their market power, by basing its conclusion regarding whether access should be mandated entirely on a "false positive" result for duplicability.

68. A second fatal flaw in the Commission's approach was to look at each category of facility in isolation, thereby failing to see the proverbial forest for the trees. The Commission's data shows that competitors lease a very small percentage of Ethernet facilities from the former monopolies, while they lease a high number of older, legacy circuits. Indeed, the CRTC has deemed legacy facilities to be essential based in part on the degree to which competitors rely on, and lease them from the former monopolies. But the Commission failed to understand that a significant proportion of the legacy circuits are leased by competitors precisely because Ethernet services are not tariffed for competitors on a workable or affordable basis. The absence of reasonably-priced Ethernet facilities and services means the only way that competitors can offer retail broadband solutions is either to self-supply Ethernet circuits, *or* use a combination of slower, legacy digital circuits in an attempt to replicate Ethernet functionality. By looking at each category of circuit in isolation, the Commission failed to relate cause (the lack of appropriate Ethernet tariffs) with effect (higher lease rates of legacy circuits). It also contravened both the Government's and its own principle of technological neutrality by making distinctions based on technology, rather than on the function that technology serves. Given the rapidity with which technologies evolve, this is a strategy that is doomed to fail.

69. Because it did not consider the relationship between the lease of legacy circuits and the need for cost-effective Ethernet tariffs, the Commission also failed to understand the degree to which competitors are creatively "making do" or are being forced to invest in technologies that are rapidly becoming obsolete. The legacy facilities to which the Commission is mandating access use different digital transmission protocols than that the IP-based protocols used by Ethernet services, making them less efficient and less economic for competitors' use in competition with the former monopolies' Ethernet services. Yet, because there is no workable Ethernet tariff, MTS Allstream has been cobbling together legacy facilities in an attempt to replicate the speed and capacity of Ethernet networks where it cannot self-supply them. This practice has never been a proper substitute for Ethernet and will not be sufficient for much longer for the simple reason that as the former monopolies upgrade their networks, those legacy facilities will no longer be available. Nor is there any significant third-party source, other than the former monopoly, from which Ethernet facilities can be obtained.[32]

70. Five years ago, a standard high-speed connection was a T-1: a digital transmission link capable of transmitting approximately 1.54 Megabits per second ("Mbps"). Today, even SMBs are looking for E10s: Ethernet connections capable of transmitting 10, 100 or even 1000 Mbps.[33] To meet customer demand in the absence of being able to lease Ethernet components, MTS Allstream puts together four T-1s, which comes close to providing the equivalent of a 10 Mbps E10. Indeed, up to 70% of T-1s leased by

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[32] MTS Allstream obtains just 1% of its Ethernet Access facilities from third party providers. Third party suppliers do not offer comparable or compatible Ethernet services and are generally more concerned with serving their own customers or their own corporate needs.

[33] Note that Ethernet facilities have the further benefit of being "scalable", meaning that the bandwidth can be adjusted to one megabit increments, depending on the needs and budgets of the customer.

MTS Allstream from the former monopolies are being used to provide high-speed broadband services. But this is a short-term solution at best. As the former monopolies migrate more and more of their network and existing customer base onto next generation networking services, the obsolescence of these older circuits will lead to their de-commissioning, to the extent that it may no longer be possible for competitors to obtain access to them at all in some locations.

71. The result is that resources and creativity which should be invested in innovative new services for tomorrow are being squandered today on technologies and solutions that are doomed to obsolescence.

The Wrong Reasons: Where the CRTC departed from Government Policy and International Experience

Regulation must support investment by the private sector, while at the same time promoting competition wherever there are potential barriers to competitive delivery of services. This is especially true for fixed next generation access networks that are likely to display the characteristics of enduring economic bottlenecks.[34]

72. The Commission's rush to judgment regarding the purported duplicability of Ethernet facilities was driven by a misapplication of the Policy Direction. Specifically, the Commission failed to adequately heed the Government's direction that its review of wholesale services "should take into account the principles of technological and competitive neutrality, 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."

73. The most significant impediment to self-supply is the business case to justify the overbuilding of the former monopolies' networks. At the proceeding leading up to the Wholesale Decision (the "Wholesale Proceeding"), former monopolies and competitors alike acknowledged that facilities will not be built where the business case does not justify that construction. Even under favourable market conditions, the business case for self-supplying components of the network is challenging. Under the current adverse capital and credit market conditions, the unnecessary duplication of the former monopolies' networks to challenge their dominant market share and ubiquitous presence is simply not going to happen.

74. It is important to recognize that there is no scenario under which complete competitor self-supply is a reality. This is evidenced by contrasting the approach taken in the United Kingdom, where careful wholesale regulation has led to continued investment and a vibrant downstream market, with that taken in the United States, where deregulation of access has led to less competition, less investment and higher prices.

75. As detailed in the Towerhouse Report, attached as Appendix 1, Ofcom, the British regulator, has taken an approach which requires the incumbent, BT, to provide wholesale products on fair and equivalent terms and conditions to all parties, including its own downstream retail arm. Since BT has been designated as having significant

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[34] Ofcom, quoted in the Towerhouse Report, page 4.

market power in wholesale Ethernet markets, it has obligations to provide those services to other communications providers at cost-oriented prices. As the Towerhouse Report notes:

> The UK has adopted a broadly technology neutral approach which recognises that local access in general needs to be treated as an economic bottleneck. This applies both to copper networks (and services) and to fibre-based services. The approach is driven by the likelihood of and scope for market entry, as well as the current state of competition rather than any consideration of the technology employed. Thus access to unbundled copper pairs is mandated because the copper local access network is not economically replicable. Likewise, access to wholesale ethernet in the local access and backhaul networks is mandated because neither those services, nor the network used to deliver them, are economically replicable.
>
> The UK approach is extremely flexible. It allows for different approaches to different markets and geographies, depending on their characteristics. This means that in some other areas there is progressive de-regulation, and on those occasions where the anticipated competition does not take hold, re-regulation... This balanced approach is focussed on regulating where necessary and only where necessary.
>
> ...
>
> Infrastructure in the access segment (for example ethernet circuits) is generally not economically replicable since it requires large, upfront, sunk investments in fibre and duct. Compared with traditional leased lines, a high proportion of ethernet circuit costs consist of building fibre and duct. Alternative communications providers are worse off in this respect since the incumbent has a significant cost advantage given the ubiquity of its network. The cost to an alternative network operator of replicating the BT network would be so high that they render full end to end network replication economically non viable. [35]

76. Such regulation has not acted as a disincentive for the incumbent to invest. Despite the fact that BT's wholesale Ethernet services are regulated, and in fact will be further regulated to align pricing more closely to costs,[36] BT announced in July 2008 that it would invest approximately £1.5 billion between now and 2012 in order to roll out fibre to the cabinet to existing areas, and fibre to the home for new-build developments.[37]

77. In contrast, the United States deregulated access in 2001 and has seen a decline in competition and in investment since that time. As detailed in the ETI Report attached as Appendix 2, Congress had understood that it was unreasonable and unrealistic to expect

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35 Towerhouse Report, pages 5 and 8.
36 Towerhouse Report, page 9.
37 Towerhouse Report, page 16.

entrants to replicate the networks of the incumbents (the RBOCs) to compete, given that these networks had been built up over nearly a century of government-protected monopoly. Regulatory obligations under the 1996 *Telecommunications Act* mandating that incumbents open their networks to competitors at cost-efficient pricing prompted a period of unprecedented competitor market entry and capital investment in telecom plant and equipment between 1996 and 2001.[38] During that period, incumbents invested approximately $150 billion in their networks. Competitors made significant investments as well, including investing $64 billion in their own networks by 2001, while simultaneously using large quantities of wholesale facilities from the incumbents to serve customers where facilities deployment was not economic or practical. By 2003, competitors served 13.5% of residential customers and 24.3% of business access lines.[39]

78. However, in response to an aggressive lobbying campaign by the incumbents, these regulatory requirements were gradually withdrawn under the Bush Administration, with the FCC relying on many of the same arguments now being relied upon by the CRTC. One of the central fallacies of the current U.S. approach is the assumption that facilities – including Ethernet facilities – are duplicable. This is precisely the error made by the CRTC. But as the ETI Report shows, there are numerous instances in the U.S. where a competitor's customer located in a building physically adjacent to a competitor's fibre route is nonetheless being served by the competitor using facilities leased from an incumbent, because the revenues available to the competitor are simply not sufficient to offset the capital investment to construct a lateral connection.

79. As a result of the deregulation of access in the United States, competitive TSPs began to exit the market, some going into bankruptcy, and some selling out to the incumbents.[40] And the incumbents have decreased their level of capital investments as Figure 2 below shows: RBOCs today are only investing about half as much in their networks as they were at the beginning of the decade. [41] Accordingly, it is clear that the deregulatory agenda in the United States has not been successful in promoting either competition or investment, let alone the duplication of existing networks.

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38 Economics and Technology Inc. Report ("ETI Report"), page 17.

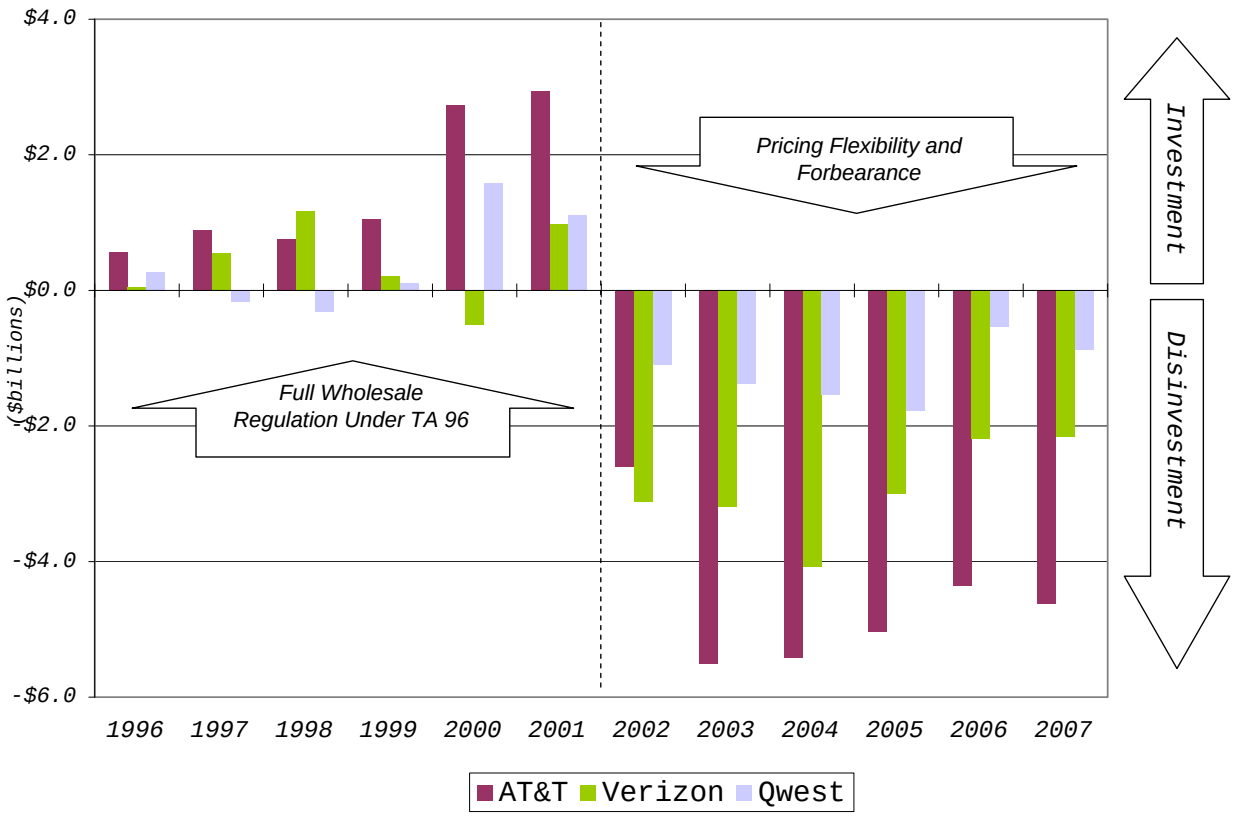
39 ETI Report, page 17.

40 As noted in Table 6 of the ETI Report, there were 21 publically traded competitive TSPs in 1999, compared with five in 2006. A further five went bankrupt and were acquired or relisted.

41 RBOC capital investments peaked in 2000-2001 at approximately $30 billion per year and dropped significantly since. Capital investments in 2006-2007 were approximately $17.5 billion per year. ETI Report at page 32.

Figure 2

Year over Year Change in RBOC Net Telephone Plant in Service



80. Given the role of "last mile" broadband in the economy, this lack of competition has serious adverse consequences to the economy as a whole. As noted in the Economics and Technology Inc. Report ("ETI Report"), when competition is weak and incumbents are dominant, telecommunications services are sold at highly inflated prices with a variety of negative impacts on the economy. Telecommunications applications that would be economically efficient at cost-based prices are forgone; monies spent on excessively priced telecommunications services are diverted from more productive uses by businesses; prices of non-telecommunications products and services rise to recover the inflated price of the telecommunications service, meaning that consumers and businesses pay more and are able to purchase less; and excessive prices reduce profits, efficiencies, output and investment in all economic sectors that depend upon telecommunications as an essential input. In short, sustained overpricing results in a "deadweight loss" that undermines the efficiency and competitiveness of the economy overall.[42]

81. While in Canada wholesale rates have historically been regulated and capped at cost plus a small markup, the CRTC is now engaging in a deregulatory policy similar to that

[42] ETI Report, pages 1-3.

which has taken place in the U.S. It is probative, therefore, to extrapolate the macroeconomic effects of this policy in the U.S. to derive an order of magnitude estimate of the likely macroeconomic impacts in Canada were a similar policy to be followed by the CRTC. In the U.S., the FCC's deregulation of the telecommunications sector and the resulting overpricing of digital network access rates by the former monopoly providers is estimated to have cost the U.S. economy 234,000 jobs over all sectors of the economy, and forgone the opportunity for gross domestic product ("GDP") growth in the range of $66 billion.[43] Canada's GDP is approximately 9% of U.S. GDP. On that basis, were the same U.S. level of wholesale service pricing to be mirrored in Canada – an outcome that would be highly likely if the CRTC were permitted to pursue the same types of deregulatory measures as has the FCC with respect to wholesale dedicated services – the economic impact on the overall Canadian economy would be a GDP loss of approximately $6 billion and a jobs loss of roughly 21,000.

82. In its Wholesale Decision, the CRTC has deemed most wholesale digital network access services to be "non-essential," either as "mandated non-essential" (where these services' current regulatory status is to remain in place indefinitely subject to an affirmative demonstration by the incumbent carriers that it should be modified), or as "non-essential subject to phase-out" (under which the regulatory price limits will be removed after a specified period of time). Either way, a competitor is now confronted with the fact that it will lose mandated access to these facilities in the future. This undermines the economic merit of any rational capital investments that are incented by the availability of cost-based wholesale services. Since telecommunications technology and networks are evolving from TDM-based networks to "next generation" IP-based networks, it is only rational for competitors to invest in IP infrastructure. Indeed MTS Allstream was the first carrier in Canada to have a full IP backbone network. However, the imminent withdrawal of Ethernet services – the access architecture for IP or broadband business services - has the consequence of discouraging further investment as, if the CRTC decisions are not reversed, this investment will ultimately be stranded.

83. Notwithstanding evidence from both of these jurisdictions that regulated, cost-oriented access by a competitor to incumbent facilities will always be necessary because Ethernet facilities are not generally economically duplicable, the Commission appears to have concluded that if it was possible for a competitor to duplicate Ethernet facilities anywhere, it could be duplicated everywhere. MTS Allstream has and continues to invest in network infrastructure where there is a business case to do so, however, MTS Allstream would have to spend billions to duplicate existing local networks in Toronto and other major Canadian cities, just to serve the customers it already has, let alone to compete for new ones. To understand what this means in terms of a return on investment, it is helpful to look at another example MTS Allstream has provided to the CRTC. At the Wholesale Proceeding, MTS Allstream explained it had won a contract to serve a national bank with over 1000 branches across Canada – but that it would take $2 billion dollars in capital expenditures if the company was to try to build to each location. Even if the company only built in certain locations, reducing the investment by half, MTS Allstream's president noted that it would still take 203 years to pay it back.[44]

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[43] ETI Report, page 3.

[44] Wholesale Proceeding: Testimony of John A. MacDonald, Hearing Transcript. Vol. 8, paras. 13371-13375.

84. In part, this is because Ethernet requires fibre for transport; while former monopolies can easily overlay fibre onto their existing networks in the ground or support structures, this represents a much more costly scenario for competitors who lack those existing networks. And a competitor's cost structure is not the same as that of a former monopoly. The cost associated with deploying Ethernet access to an entire building outstrips the cost of leasing a DS3 (legacy) circuit, even with the inflated rates for those components being charged by the former monopolies. Indeed, even where MTS Allstream has self-supplied a DS3 in order to serve a client in a particular building, it may not be able to justify running a line from that DS3 to another suite in the same building unless its demand reaches a critical mass.

85. While MTS Allstream continues to invest in its network in as efficient a manner as possible – and indeed, as discussed earlier in this Petition, has already spent billions of dollars doing just that across Canada – the proposition that it can simply replicate the former monopolies' networks at will is not supportable and was not merited on the evidence. The consequences of this ill-advised Decision will be to divert and limit the rational investments competitors would otherwise make to enhance choice, innovation and pricing of these critical services to Canadian businesses and consumers.

86. It is notable that here again CRTC has departed from sound Government policy. The Government has recognized that "hybrid" TSPs – those who lease essential components of other parties' networks (usually that of the former monopolies), and combine them with elements of their own networks – are fundamental to ensuring that Canadians have a healthy choice of competitive providers. The Government has declared a preference for facilities-based competition, and defined a facilities-based telecommunications service provider as "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."[45] (Emphasis added).

87. The Government has also, in its Policy Direction, issued clear direction that the framework for wholesale services should be competitively and technologically neutral. Yet, the Decision fails to take this into account. In the face of the Decision, in the overwhelming number of instances where it is not, in fact, feasible for a competitor to duplicate Ethernet facilities, competitors will either have to negotiate with the former monopolies for that access or provide an inferior solution to their customers. Neither of these options is viable for providing Canadian business customers with any sustainable choice to the former monopolies. Accordingly, rather than promoting competition that uses advanced Ethernet technologies, the CRTC's Decision actively frustrates competition in this crucial area by implicitly favouring the use of older over newer technology.

88. It is self-evident that the large former monopolies have a strong incentive and opportunity to abuse their already dominant position in the business market by raising rates for their wholesale services and impeding competition and choice for SMBs for which these services are so critical. If the Government harbours any doubt regarding the former monopolies' incentive to frustrate competition, it need look no further than the treatment of the Public Works and Government Services Canada at the hands of Bell, when the Government attempted to transition its business for the Department of National

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[45] Order Varying Telecom Decision 2006-15, P.C. 2007-532.

Defence from Bell to TELUS.[46] In that situation, Bell unilaterally filed an amendment to its customer service arrangement increasing its rates by more than 50% when the Government requested an 18-month extension to its contract with Bell. Bell then required PWGSC to agree to a minimum contract period and a minimum revenue guarantee as part of the terms upon which it would continue to provide services while TELUS transitioned the department at issue to its network. TELUS filed an application with the CRTC requesting non-discriminatory transition terms, which was denied. Subsequently the Government also filed an application requesting, among other relief, that the CRTC make a finding of fact as to whether Bell had complied with its obligations under Section 27 of the *Telecommunications Act* (which requires that rates be just and reasonable, and prohibits unjust discrimination or the granting of an undue preference). Following an expedited oral hearing and the submission of revised offers by the parties, the CRTC chose the final offer put forward by Bell. The CRTC indicated that it considered the circumstances of the case to be unique, given the national security issues that made service interruption untenable. It also noted that the integrated nature of the services being provided made them inseparable, and that Bell was the only service provider that was able to provide the services without interruption. However, the CRTC failed to recognize that only Bell could provide the transition services: it is dominant in the provision of access services in its territory and thus both the Government and TELUS are effectively at the mercy of Bell.

89. Other evidence of the strength of these former monopolies' market power abounds. Retail forbearance, which under the *Telecommunications Act* can only be granted where competition for a service is sufficient to protect the interests of users,[47] has in fact resulted in price increases to business customers across the country. To take but a few examples, between August 2008 and the time of this petition, TELUS raised its costs for local business contract option services and forborne Centrex services by 20% each, eliminated customer volume pricing plans for digital network access interexchange channels on forborne routes, resulting in a rate increase of 41%, and has raised rate for forborne interexchange private line ("IXPL") data and internet services by 16%. As Figure 3 below illustrates the pace of price increases for business local / access services accelerated after retail forbearance became a reality. While prices in the specific geographic markets where competition actually exists decreased, competitor offers by 28%, overall the former monopolies have increased prices in this market by 11% since 2005. The situation that had existed in the wireless market has replicated itself in the wireline market, i.e.: few providers; high prices for consumers with continual price increases; and a low rate of innovation. This is why it is so crucial to get the wholesale framework right. Else, as retail markets are forborne, there is no relief in sight for the consumer. Enabling dominant incumbents to charge competitors monopolistic rates for access is counterproductive to the goal of stimulating competition and is unfair both to competitors and users.

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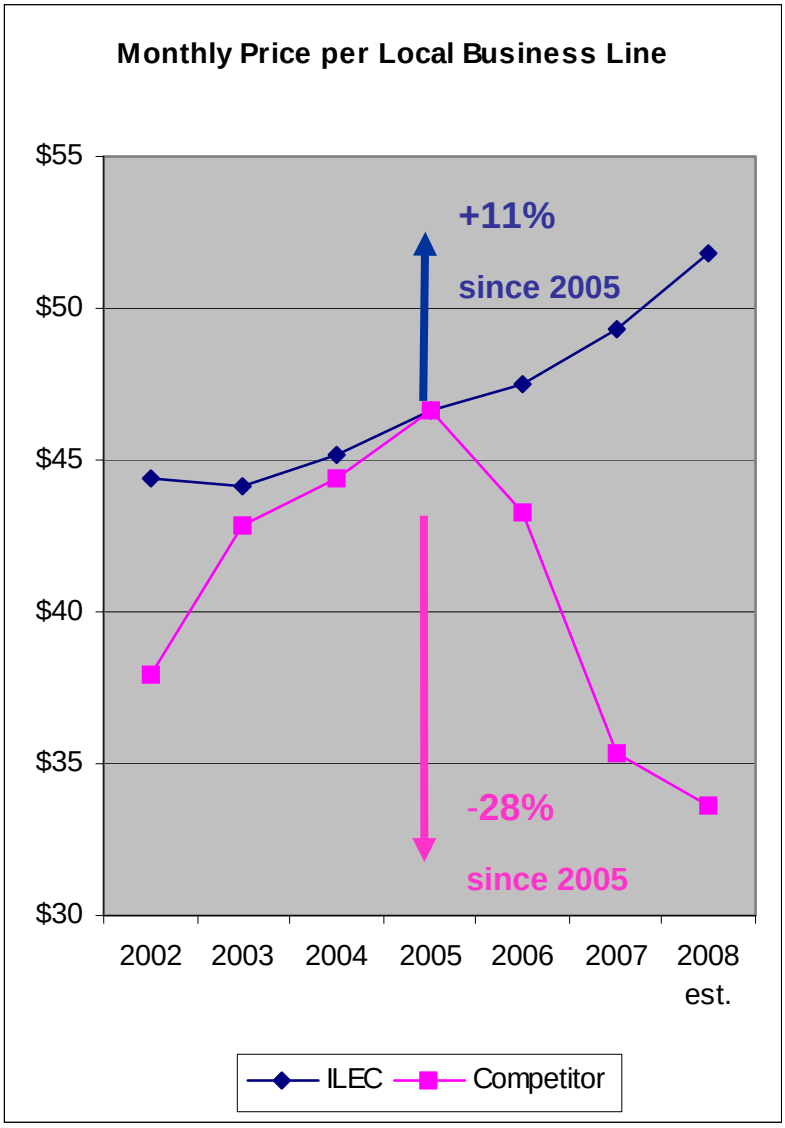
[46] See *PWGSC Part VII Application pursuant to Section 27 of the Telecommunications Act*, CRTC File No. 8661-P54-200815251.

[47] Telecommunications Act, s. 34(2).

Figure 3



Source: CRTC Communications Monitoring Report 2008 (2002 – 2007)

90. The CRTC has had three opportunities to remedy this situation and has failed to do so each time. It failed to implement the Order in 2007, which would have finally engendered a competitive market for Ethernet services. It failed to understand the evidence before it in the Wholesale Proceeding in 2008 and accordingly categorized Ethernet services as non-essential and subject to phase out. And it failed just months later to rectify the situation when it denied MTS Allstream's application in the Ethernet Decision.

91. Accordingly, the Government must be prepared to step in, as it has done in other instances where the CRTC has persisted in a policy that will limit competition and impede economic growth, and reclaim its agenda and policy for all Canadians.

The Remedy: Correcting the Decision to Stimulate Competition, Innovation and Productivity

"Competitive telecommunications markets are vital to a strong economy, especially given the rapid changes in information technologies that are transforming how businesses operate and how individuals communicate and gather information."[48]

92. Now more than ever, government policy should support and encourage competition, innovation and productivity. Challenging economic times require that Canadian businesses have the ability to use every tool at their disposal to become fleeter, more efficient and more creative players in the global marketplace. The Conference Board of Canada is just the latest to study Canada's record of productivity and find it wanting.[49] A competitive telecommunications market has a key role to play in enhancing productivity of all businesses, from the largest multinationals to the home-based enterprise.

93. Canadian SMBs, in particular, need access to state-of-the-art telecommunications infrastructure, including broadband and advanced ICTs, to grow and prosper. And Canada has a number of vibrant competitors, like MTS Allstream, that are willing and able to provide these services.

94. By correcting the Decision, the Government can effectively enact a significant stimulus package for small and medium Canadian businesses – at no cost to the taxpayer. There are three aspects to this stimulus package. First, cost-effective and workable Ethernet access will provide both the ability and incentive for competitors to create innovative new services that will be of benefit to all consumers, but which will help SMBs in particular to flourish. One example, as discussed earlier in this document, is MTS Allstream's unified communications package – a new application that uses MTS Allstream's MPLS network to enable SMBs to use unified communications software. Second, more competition in the market will drive down prices and create more flexible service offerings, giving consumers and businesses alike relief from monopolistic pricing practices. And third, because telecommunications is an enormous enabler in the knowledge economy, businesses – particularly SMBs – will take advantage of these lower prices and new services to create new and innovative products and services themselves.

95. It must be remembered that we are only at the beginning of the broadband revolution. After initially leading the world in broadband penetration, Canada has begun to fall behind its international counterparts in not just penetration – whereas, it has plunged from second to 10th among OECD countries over the past six years[50] – but also in the speed and quality of its networks.

96. Broadband penetration is only part of the answer. As Figure 4 shows Canadians today pay the fourth highest Internet access rates per Mbit/s of bandwidth in the OECD: only users in Turkey, Mexico and Greece pay more.[51] Canada's average advertised bandwidth speed also lags most of its G7 counter parts. And while other countries hasten to upgrade their networks to offer faster download speeds to subscribers, led by

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48 Advantage Canada at 81.

49 Conference Board of Canada, "How Canada Performs" ranked Canada as 13th out of 17 countries in its capacity to innovate.

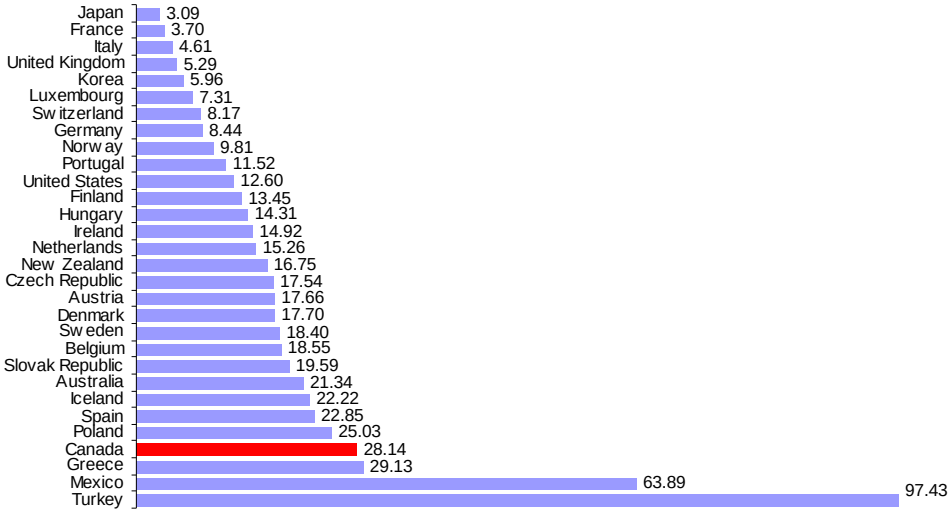
50 Broadband subscribers per 100 inhabitants (June 2008), available online: OECD, http://www.oecd.org/dataoecd/21/35/39574709.xls.

51 Average broadband monthly price per advertised Mbit/s, USD PPP, October 2007, available online: OECD, http://www.oecd.org/dataoecd/22/45/39575011.xls .

Korea and Japan (where some providers offer broadband at 100 Mbit/s), Canada sits in the middle of the pack, with average download speeds of less than 8 Mbit/s.[52]

Figure 4

Average broadband monthly price per advertised Mbit/s, Oct 2007

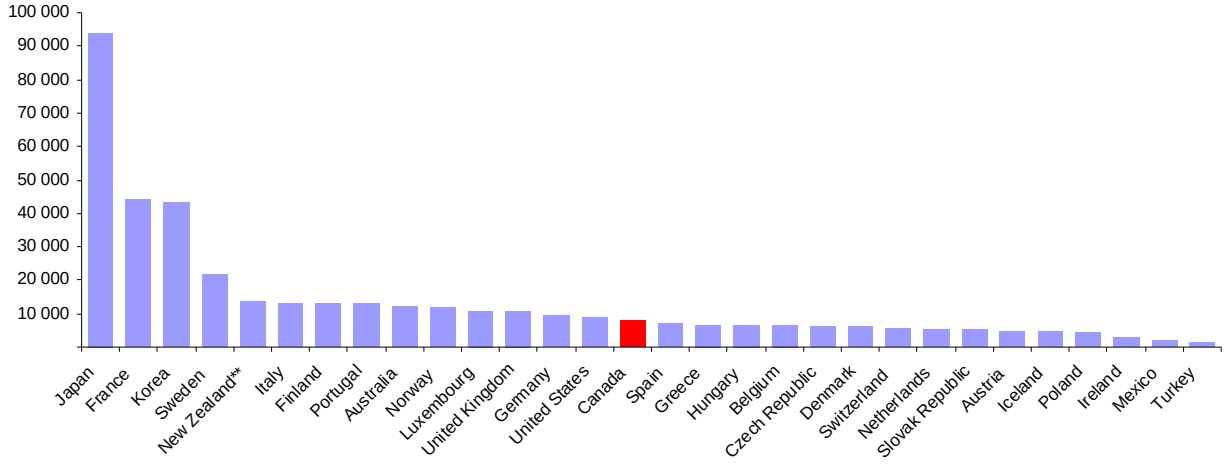


Source: OECD Broadband Statistics, www.oecd.org

Figure 5

[52] Average advertised broadband download speed by country, October 2007, available online: OECD, http://www.oecd.org/dataoecd/10/53/39575086.xls. Note that the highest end-user broadband download speed available is 50 Mbit/s, offered by Videotron.

Average advertised broadband download speed, by country, Mbit/s, October 2007



Source: OECD Broadband Statistics, www.oecd.org

97. Canada's network infrastructure is still not quite able to deliver advanced video content (including television and film) consistently to all users. Technological advances will be needed as new, as-yet unexplored possibilities arise for new kinds of digital content and applications. We expect extraordinary new opportunities will arise for creators, consumers and businesses, including those in the realm of tele-immersion (a hypothetical future media technology that would simulate the co-presence of distant people well enough for them to partially forget that a simulation is involved[53]), which would enhance productivity by, among other things, dramatically cutting travel costs; or, to take another example, 3D interactive applications that could be used either in the home or a business setting. However, it has been estimated that the infrastructure to support 3D applications would require about one order of magnitude improvement in bandwidth capability (i.e. ten times the current level), while tele-immersive content would require an improvement of about two orders of magnitude. To make this kind of investment in networks requires a fully competitive market; and creating that market depends on the right wholesale regime.

98. Given the unleashed potential that innovative use of the Internet offers Canadian businesses to enhance productivity, it is not surprising that, as Figure 6 shows, Canadian productivity performance also trails all but one of our G7 counter parts.

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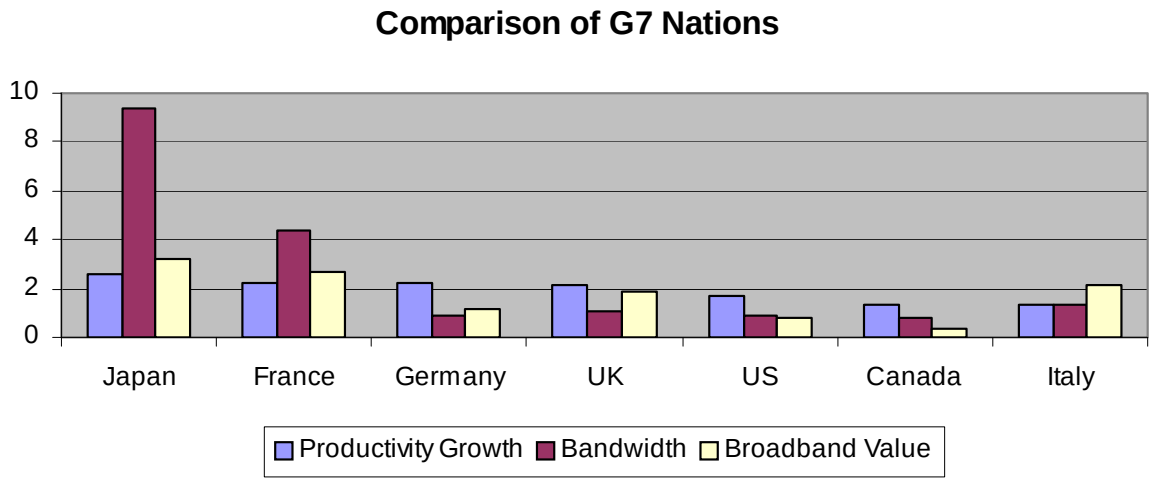
53 See Report of Jaron Lanier, paras. 244-245, Appendix 1 to MTS Allstream submission to Broadcasting Notice of Public Hearing CRTC 2008-11, *Canadian broadcasting in new media*, 15 October 2008.

Figure 6



Prod. growth: average growth in real GDP per hour worked, 1981 – 2006

Bandwidth: average advertised broadband download speed, x10Mb/s

Broadband value: bandwidth (in multiples of 100kb/s) per dollar

Source: OECD Broadband Statistics, OECD Labour Productivity July 2007, www.oecd.org

99. Contrary to the predictable arguments of the large incumbents, granting access by competitors to their networks on reasonable terms and conditions will not limit the incentives of competitors or themselves to invest. As discussed earlier in this Petition, this has been abundantly proven in Europe, just as the reverse has been shown in the United States, which has not mandated access to next generation services and facilities for competitors. Competition can and should take place on networks, not solely between them.

100. Canada's own record of innovation in telecommunications makes it abundantly clear that competitors have been the driving force behind creative new products and services, which once launched have then forced a competitive response from incumbents. Typically such innovative new services take shape through a mix of competitor owned and leased facilities, 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 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 ICT.

101. Voicemail provides a fairly simple example of such an evolution. In 1982, a decision was rendered by the CRTC allowing third parties to install home-based answering machines on customers' telephone lines, against the objections of the former

monopolies who did not wish to permit terminal attachment. Eventually the incumbent telephone companies responded to this competitor innovation by envisioning the advantages of a voicemail service integrated with its switching platforms, which would allow customers to receive voicemail messages even when the line is busy – a feature that an answering machine cannot provide. Today voicemail is offered as a fully integrated network feature.

102. Another example is dial-up Internet, which was first provided by competitors. Initially, competitors offered dial-up Internet services by leasing Centrex telephone lines from the former monopolies that connected to banks of modems at the competitor's premises. In 1995 Bell attempted to stem the growth of these services by applying a Centrex rate increase of 300%. The CRTC intervened to deal with this, and eventually, Bell and TELUS launched their own retail Internet services and subsequently launched a managed wholesale dialup service that integrated the modem banks into its voice network.

103. The embrace of Voice over Internet Protocol ("VoIP") is yet another example. If it hadn't been for the pioneering work of individuals and new entrants, it is unlikely that VoIP would be as broadly pursued as it is today. The former monopolies have already begun to offer network-based VoIP services such as Centrex IP. It is becoming clear that in the business market in particular, analog voice services are on their way out, while IP-based services are fast replacing them.

104. This pattern has been repeated countless times, with digital network services, IP Networking, E10/E100 Transparent local area network and xDSL technology, among other examples.[54]

105. In each of these cases innovation was the result of competition. In each of these cases the competitors used the former monopolies' network facilities in a creative way to offer these, at the time, new services. In each case, the first reaction of the former monopolies was to attempt to quash competition, only to eventually offer the same or similar service themselves. There is thus no evidence to support a prediction that granting reasonable, cost-based access to Ethernet facilities would in any way serve as a disinvestment either to innovation or investment. To the contrary, the evidence shows that former monopoly innovation is a reaction to competitor innovation.

106. As noted earlier in this Petition, MTS Allstream has already invested billions of dollars in network infrastructure over the past 15 years. In the right economic conditions, it is poised to invest further. But the ability to lease the components of the former monopolies' broadband, IP-based local access and transport networks on a fully unbundled, cost-based rate basis is critical to increasing incentives for all parties to invest in, and construct, competing network facilities.

107. When establishing its policy for the AWS auction, this Government did not permit itself to be influenced by the incumbents' self-serving arguments that setting aside spectrum for new wireless entrants would subsidize their entry plans and lead to lower investment. In that case, enlightened Government policy opened the doors to new entrants and reaped

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[54] For a complete description of each of these innovations, please see MTS Allstream's submission to the Telecommunications Policy Review Panel, para. 60.

a reward of $4.5 billion – almost three times what had been predicted. As a result, competition in the wireless market is set to flourish, and we are already seeing lower prices and better deals for consumers. That farsighted decision by the Government protected the public interest, not that of the incumbents, and paved the way for a healthy and competitive environment for wireless services.

108. In this case, a policy framework that encourages healthy competition with the incumbents – all of which still control access to Canada's networks, and have the most to lose from innovation – is in the best interests of Canadian consumers and businesses, particularly SMBs who currently suffer from a lack of choice and high prices for advanced telecommunications services. It will allow competitors, consumers and businesses to reap the rewards of more choice, lower prices, greater productivity and innovation, in line with existing Canadian government policy.

109. Accordingly, MTS Allstream requests that the Government exercise its powers under section 12 of the *Telecommunications Act* direct the Commission to categorize both Ethernet and DSL facilities as "conditional essential" which are to be unbundled and provided by the incumbents to competitors at cost-based rates. By varying the Ethernet and ADSL Decisions, the Government will put the telecommunications industry in Canada back on the right track with a policy that will foster healthy competition, spur investment and innovation, and create the conditions that will enable SMBs in particular to grow and flourish. In the alternative MTS Allstream requests that the Government refer the matter back to the CRTC with specific instructions to reverse its classification of wholesale Ethernet and ADSL services.

All of which is respectfully submitted on behalf of the Petitioner this 11th day of March 2009.

MTS Allstream(CRTC)19July07-2001

Complete the following tables to provide a high-level estimate of the degree to which your company self-provisions transmission facilities, obtains them from a third-party supplier or leases them from an ILEC. With regard to the ILECs, responses are to be made in the context of 'out-of-territory' operations.

Use the following parameters when completing the tables:

1. For each type of transmission facility listed below, indicate the percent your company self-provisions, the percent that is obtained from a 3rd party and the percent that is leased from an ILEC. If data is not readily available, provide a best estimate.

2. Figures are to be provided for metropolitan areas of varying size, classified as medium (e.g. London, Halifax, Saskatoon), large (e.g. Ottawa-Gatineau, Calgary, Winnipeg) and major (e.g. Montreal, Toronto, Vancouver). See http://www40.statcan.ca/l01/cst01/demo05a.htm for more examples.

3. Figures are to be further broken down into the method of provision used in the downtown core vs. the non-downtown core of metropolitan areas.

4. Mark "n/a" if your company does not provide a particular service in a given type of metropolitan area.

a) DS-0 access and transport

DS-0	DS-0 Access						DS-0 Transport					
	Medium metro areas		Large metro areas		Major metro areas		Medium metro areas		Large metro areas		Major metro areas	
	Core	Non	Core	Non	Core	Non	Core	Non	Core	Non	Core	Non
Self-provision												
Obtain from 3rd party												
Lease from ILEC												

b) DS-1 access and transport

DS-1	DS-1 Access						DS-1 Transport					
	Medium metro areas		Large metro areas		Major metro areas		Medium metro areas		Large metro areas		Major metro areas	
	Core	Non	Core	Non	Core	Non	Core	Non	Core	Non	Core	Non
Self-provision												
Obtain from 3rd party												
Lease from ILEC												

c) DS-3 access and transport

DS-3	DS-3 Access						DS-3 Transport					
	Medium metro areas		Large metro areas		Major metro areas		Medium metro areas		Large metro areas		Major metro areas	
	Core	Non	Core	Non	Core	Non	Core	Non	Core	Non	Core	Non
Self-provision												
Obtain from 3rd party												
Lease from ILEC												

d) OC-3 access and transport

OC-3	OC-3 Access						OC-3 Transport					
	Medium metro areas		Large metro areas		Major metro areas		Medium metro areas		Large metro areas		Major metro areas	
	Core	Non	Core	Non	Core	Non	Core	Non	Core	Non	Core	Non
Self-provision												
Obtain from 3rd party												
Lease												

from ILEC												

e) OC-12 access and transport

OC-12	OC-12 Access						OC-12 Transport					
	Medium metro areas		Large metro areas		Major metro areas		Medium metro areas		Large metro areas		Major metro areas	
	Core	Non	Core	Non	Core	Non	Core	Non	Core	Non	Core	Non
Self-provision												
Obtain from 3rd party												
Lease from ILEC												

f) Ethernet access and transport

Ethernet	Ethernet Access						Ethernet Transport					
	Medium metro areas		Large metro areas		Major metro areas		Medium metro areas		Large metro areas		Major metro areas	
	Core	Non	Core	Non	Core	Non	Core	Non	Core	Non	Core	Non
Self-provision												
Obtain from 3rd party												
Lease from ILEC												