



**PREVENTING ABUSE OF DOMINANCE  
IN CANADIAN TELECOM MARKETS**

prepared for

MTS Allstream Inc.

by

Lee L. Selwyn  
Helen E. Golding

December 2006



## TABLE OF CONTENTS

INTRODUCTION	1
Safeguarding competitor access to essential facilities is the best means to ensure the development and persistence of competition in dynamic telecom markets	2
Antitrust metrics as a foundation for fostering competition at the wholesale level	2
Remedies that provide only an ex-post response to the abuse of dominance are inadequate to foster competition in the dynamic telecommunications industry. The dismantling of the TA96 competitive framework	3
US experience demonstrates the pitfalls of abandoning antitrust analysis rooted in quantitative metrics	4
A stable framework for ensuring economic competitor access to wholesale facilities needs to precede further forbearance from retail regulation	7
The Bureau’s overall approach is rooted in well-established antitrust principles	8
The focus on “essential facilities”	8
Market definition	9
Product market vs. geographic market definitions	10
Supply-based market definitions	14
Market Power Assessment	17
Price and profitability	17
The “indirect indicators”	18
Anticompetitive acts	21
Raising rivals’ costs and market foreclosure, margin squeezing, and predatory pricing	22

Tests for predatory conduct	24
Bundling	25
CONCLUSION AND RECOMMENDATIONS	26

## **Tables and Figures**

### **Tables**

1	Network Externalities Grow Exponentially as the Number of On-Net Nodes Increases	13
2	Most CLEC enterprise customers are being served using special access, even on streets where CLEC-owned fiber has been deployed	14
3	RBOC Special Access Rates of Return	17

### **Figures**

1	The number of potential point-to-point connections that can be created on a network increases exponentially with the number of individual “nodes” on the network	12
2	SBC map of Downtown San Francisco showing CLEC enterprise customers being served using Special Access and CLEC “lit” buildings. Source: SBC <i>ex parte</i> letter dated August 18, 2004, FCC CC Docket No. 01-338	16

# PREVENTING ABUSE OF DOMINANCE IN CANADIAN TELECOM MARKETS

prepared for MTS Allstream Inc.

by

Lee L. Selwyn  
Helen E. Golding<sup>1</sup>

## Introduction

On September 26, 2006, the Competition Bureau (“Bureau”) issued its “Draft Information Bulletin on the Abuse of Dominance Provisions as Applied to the Telecommunications Industry” (“Bulletin”). The approach that the Bureau has taken – which is based upon traditional antitrust principles – can support the development and sustainability of robust competition in Canada’s telecommunications industry. The merits of the Bureau’s approach, if implemented properly, are particularly evident when contrasted with the overly simplistic and arbitrary devices that have been adopted by the US Federal Communications Commission (“FCC”) and by US courts as a means for assessing the “presence” of competition – devices whose use has played a major role in the rapid decline of competition in US telecommunications markets.

The Bureau’s draft Bulletin has been issued at a time that several other initiatives reviewing regulation of wholesale and retail telecommunications services are in play before other government regulators. The CRTC has recently issued a Public Notice (CRTC 2006-14, November 9, 2006) in its *Review of Regulatory Framework for Wholesale Services and Definition of Essential Service*. The Bureau’s draft Information Bulletin is cited by the CRTC, which is considering, among other things, whether to align its definition of “essential service” with the “essential facility” definition proposed by the Competition Bureau. There is also a recent proposal by the Minister of Industry to vary the framework for regulation of retail local exchange services that was adopted by the CRTC in its Telecom Decision CRTC 2006-15 (*Forbearance from the Regulation of Retail Local Exchange Services*). The

---

1. The authors are, respectively, President and Vice President of Economics and Technology, Inc. Assisting with the research for this report were Susan M. Gately and Colin B. Weir. The views expressed in this report are those of the authors.

Minister of Industry's proposal would "replace the CRTC's market share test with one that emphasizes the presence of competitive infrastructure in a given geographical area" (Industry Canada Press Release, December 11, 2006) rather than any direct evaluation of the impact that the presence of any such "competitive infrastructure" actually has in constraining monopolistic conduct by the incumbent carriers. However, anything short of near-ubiquitous competitive facilities deployment by several entrants is unlikely to constrain or otherwise discipline the incumbents' conduct. Effective competition at the *retail* level requires that entrants be afforded direct, efficient, and economically priced access to the incumbents' wholesale facilities, making policies aimed at assuring the continuation and expansion of vigorous, robust wholesale access all the more important by the possibility of a more relaxed standard for the deregulation of *retail* services.

Substantively, it is paramount that these initiatives combine to assure competitors of the availability of essential facilities and prevent abuses of dominance by incumbents as providers of wholesale access. Procedurally, there should be coordination of the various policy proposals to form a clear and consistent definitional and regulatory framework. Stakeholders should know their rights and obligations and have confidence that there is a clear and efficient path for getting relief when their rights are jeopardized. It would thus be highly constructive for the Bureau and the CRTC to develop and apply consistent definitions of anticompetitive conduct.

The purpose of this paper is to review the key provisions of the Competition Bureau's draft Bulletin and to suggest how the framework the Bureau proposes can be developed and applied to achieve the pro-competition objectives for the telecommunications industry that are presumably shared by the Competition Bureau, the CRTC, and by Industry Canada.

## **Safeguarding competitor access to essential facilities is the best means to ensure the development and persistence of competition in dynamic telecom markets**

### **Antitrust metrics as a foundation for fostering competition at the wholesale level**

In the draft Bulletin, the Bureau reviews its enforcement policies in the context of the most recent developments in Canada's telecommunications industry. As discussed in more detail below, the approach described in the Bureau's draft Bulletin focuses largely on quantifiable measures of actual competition that have longstanding acceptance in antitrust analysis. Key strengths in the Bureau's approach include a strong focus upon protecting access to essential facilities, careful definition of the relevant geographic and product markets, and a recognition that dominant providers can deploy multiple strategies to reduce the profitability of their competitors. With the exception of certain relatively minor concerns, we strongly endorse the analytical framework that the Bureau describes in the draft Bulletin and urge its incorporation into Canada's overall regulatory framework for fostering and sustaining telecommunications competition.

**Remedies that provide only an ex-post response to the abuse of dominance are inadequate to foster competition in the dynamic telecommunications industry.**

The principal limitation in the approach outlined in the draft Bulletin is the after-the-fact (*ex post*) nature of the proposed remedy. Consistent with traditional antitrust enforcement (reflected in the legislative framework that defines the Bureau's mandate), the Bureau waits for an abuse of dominance to occur, analyzes the evidence that corroborates this condition, and upon an affirmative determination that such abuse has in fact occurred, can then act to remedy the situation. This might not be a problem if enforcement were swift and penalties severe, but in practice neither of these conditions applies. Antitrust enforcement is slow and costly, and in most cases the penalties for unlawful conduct, when they are ultimately imposed, fall far short of the gain realized by the perpetrator from its unlawful conduct.

For example, if it costs \$40 to park a car in a parking lot versus a \$10 fine for parking in a no parking zone, it is cheaper to park illegally and pay the \$10 than to park legally for \$40. Similarly, if the fine for illegal parking is \$1,000 but there is only a one-in-one-thousand chance of getting a fine, all but the most risk-averse drivers would opt to take their chances and park illegally. Because antitrust enforcement is slow, the unlawful conduct is likely to persist for an extended period of time. In addition, because antitrust penalties are both infrequent and typically small (relative to the potential gains from the wrongful conduct), the deterrent effect is further limited. In a dynamic and rapidly changing industry such as telecom, this type of after-the-fact enforcement may be of little value, because the entrant will be forced out of business long before the incumbent is punished or forced to cease and desist from whatever conduct is ultimately found to violate antitrust law.

Consequently, the most effective method of applying the antitrust approach is one that operates to prevent or at least strongly discourage anticompetitive conduct before it arises, rather than threatening punishment after the fact. Even if the implementation of such an *ex ante* approach falls outside the Bureau's primary legislative mandate, the Bureau should lend its expertise to supporting competition by taking an active role in advocating for the adoption of proactive measures by the CRTC.

The Bureau has defined "essential facility" as "an input that provides the firm controlling it with the power to lessen or prevent competition in a relevant downstream market,"<sup>2</sup> and proposes that the denial of competitor access to such "essential facilities" by the dominant firm be considered an abuse of such dominance.<sup>3</sup> The Draft Bulletin identifies three conditions that must be present "[f]or such a denial to raise an issue under the Act:"

- (i) A vertically integrated firm that is dominant in two markets. The first relevant market is the upstream market (or wholesale market) for the facility. The second relevant market is the

---

2. Bulletin, §4.2.2, at 17.

3. *Id.*

downstream market (or retail market) in which the facility is an input. A necessary condition for concluding that there is dominance in the upstream market is that it is not practical or feasible for competitors to duplicate the facility in question.

- (ii) A denial of access to the facility for the purpose of excluding competitors from entering or expanding in the downstream market or otherwise negatively affecting their ability to compete.
- (iii) The denial has had, is having or is likely to have the effect of substantially lessening or preventing competition in the downstream market.<sup>4</sup>

As we discuss in greater detail below, telecommunications differs fundamentally from other types of services and commodities because its purpose is to provide *connectivity* among multiple locations. The presence of competing facilities at *some*, but at less than all, locations at which a given customer requires connectivity may limit or prevent an entrant from serving that customer *even at those specific locations at which the entrant has deployed its own facilities*. Affording entrants access to the incumbents' network permits the less-than-ubiquitous entrant to introduce new and innovative services and to offer customers connectivity that is comparable to that being offered by the incumbent, using its own facilities where available and those of the incumbent where not. Conversely, if the entrant is *denied* access to the incumbent's network, it will be unable to offer customers comparable connectivity and will be excluded from serving any customers whose needs cannot be fully satisfied entirely via the entrant's own – and highly limited – facilities network.

In particular, condition (iii) (“The denial has had, is having or is likely to have the effect of substantially lessening or preventing competition in the downstream market.”) underscores the critical importance of proactive enforcement so as to prevent the denial of access and the resulting abuse of dominance *before they occur*. The CRTC may be in a superior position to promulgate appropriate regulations and enforce them on an ongoing basis. In that event, the Bureau can play a key role in helping to ensure that the CRTC adopts and applies the Bureau's definition of “essential facility” and views the market at a comprehensive level and not at a microscopic, building-by-building basis.

### **US experience demonstrates the pitfalls of abandoning antitrust analysis rooted in quantitative metrics**

Incumbent carriers in the US and Canada have long resisted the use of antitrust-type competition metrics (e.g., market shares, Herfindahl-Hirschman Indices (“HHIs”), price/cost ratios, profit margins, etc.) and in favor of what might best be described as an *existential* approach to identifying the presence and – more importantly – the *sufficiency* of competition as a basis for regulatory flexibility, forbearance and, ultimately, deregulation. The incumbent carriers posit that if competitive entry can be

---

4. *Id.*, footnote references omitted.

shown to have occurred *somewhere*, then by inference such entry is feasible and likely to occur *anywhere and everywhere*. This notion provides the basis for the latest version of “market contestability” theory that has formed the underpinnings of recent US telecom policy initiatives.<sup>5</sup> Unfortunately, this version of “market contestability” theory appears to have been embraced by the Minister of Industry in his December 11, 2006 proposal to “replace the CRTC’s market share test with one that emphasizes the presence of competitive infrastructure in a given geographical area.”

“Market contestability” theory suggests that the mere *potential* for entry into a market by a rival is by itself sufficient to discipline an incumbent’s exercise of market power. It argues, for example, that if competitors have “lit” a small percentage of commercial buildings in a given metropolitan area, the “threat” that they could serve any building in that geographic area would in and of itself be sufficient to prevent the incumbent from setting its prices at monopolistic levels. We refer to this approach as “existential” because it allows the incumbent to point at the *existence* of competitors in – but by no means throughout – the geographic market, rather than evidence of *actual* competition (or even a quantifiable measure of competitive potential). But by focusing upon facilities deployment at a building-by-building level, the existential approach takes what amounts to a “five-foot view” of the market when what is needed is a “30,000-foot” perspective. Building-by-building analysis ignores the single most critical factor that makes telecommunications unique among traditional distribution utilities – *connectivity*.

In recent years, the FCC has used such an existential approach to support initiatives aimed at relaxing or forbearing from both retail and wholesale regulation, and in each instance this approach has had tangible, and *decidedly negative*, results for competition. For example, in its 1999 *Special Access Pricing Flexibility* order, the FCC adopted a regulatory scheme that granted an ILEC pricing flexibility based upon such indirect evidence. To qualify for pricing flexibility, the ILEC need only demonstrate that a competitor is present (by virtue of having established collocation) in selected wire centers within a Metropolitan Statistical Area (MSA). The threshold levels of competitor presence were defined in terms of a percentage of wire centers within the MSA or, alternatively, wire centers that accounted for a predesignated percentage of the incumbent’s revenues within the MSA. However, as discussed in greater detail below, these thresholds can be easily satisfied without there being sufficient actual competition to prevent the incumbent from implementing a significant and non-transitory increase in price.

In fact, this “mere existence” standard has been so easily satisfied that there is now full pricing flexibility in most major (and many minor) urban markets across the US, despite the absence of any actual competitive presence in the overwhelming majority of commercial buildings nationwide. And, having intentionally de-linked its approach from quantitative measures of competition, the FCC has been able to ignore compelling evidence that under its “pricing flexibility” rules special access

---

5. See, e.g., William J. Baumol, John C. Panzar & Robert D. Willig, *Contestable Markets and the Theory of Industry Structure* (1982). Other economist have challenged the extent to which contestable markets exist in the real world. See, e.g., William G. Shepherd, “Contestability” vs. Competition, 74 American Economic Review 572 (1994).

rates and BOC special access rates of return have far outstripped any reasonably specified competitive levels. Indeed, a November 29, 2006 report by the US Congress' Government Accountability Office (GAO) on the "Extent of Competition in Dedicated Access Services" cites the escalation in prices and profits as the basis for its conclusion that competition for special access type services is insufficient to discipline the incumbents' conduct.<sup>6</sup>

In its 2005 *Triennial Review Remand Order*, the FCC adopted a similar approach as a basis for determining the existence of wholesale competition (and the sustainability of retail competition dependent upon competitive local access). Under the US *1996 Telecommunications Act*, ILECs are required to offer CLECs cost-based access to unbundled network elements (UNEs) unless it can be shown that CLECs are not "impaired" from competing without such mandated access. The FCC determined that CLECs were not impaired without access to DS-1 and DS-3 UNEs once the number of CLECs with collocations and the number of business exchange access lines served out of a given wire center surpassed designated levels (which the FCC referred to as the "triggers").<sup>7</sup>

As with the pricing flexibility rules, the "trigger" analysis permitted the ILEC to point to isolated entry by competitors within what the FCC had arbitrarily established as "the relevant geographic market" – i.e., the entire MSA – as evidence that competition throughout the market existed or that entry therein could be accomplished with ease. However, the ILECs strenuously resisted showing – and the FCC has never attempted to verify – that this hypothetical view was borne out by the standard competitive metrics. In reality, the prospects for competition were considerably more challenging than the "trigger" analysis suggested. Perhaps most telling was the reaction of the two largest competitive providers in the US – AT&T and MCI – who, shortly after the release of the FCC's decision – agreed to be acquired by incumbent carriers.

Support for this type of existential analysis is popular among incumbents precisely because it avoids the need to evaluate the extent to which (actual) competition is constraining the incumbents' market power or even to make fact-based (rather than speculative) judgments about the potential for competitive entry. It also avoids the need for the incumbent to defend its extraordinarily high

---

6. United States Government Accountability Office, Report to the Chairman, Committee on Government Reform, House of Representatives, *FCC Needs to Improve its Ability to Monitor and Determine the Extent of Competition in Dedicated Access Services*, GAO-07-80, November 2006 ("GAO Report"). Available at [www.gao.gov/cgi-bin/getrpt/GAO-07-80](http://www.gao.gov/cgi-bin/getrpt/GAO-07-80).

7. *Unbundled Access to Network Elements; Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers; In the Matter of Unbundled Access to Network Elements; Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, WC Docket No. 04-313; CC Docket No. 01-338, WC Docket No. 04-313; CC Docket No. 01-338, *Order on Remand*, 20 FCC Rcd 2533 (2005) ("Triennial Review Remand Order"). Under this regime, the FCC triggers find "no impairment" [and thus no requirement for ILECs to offer wholesale facilities] :

(a) with respect to DS1 transport on routes connecting a pair of wire centers, "where both wire centers contain at least four fiber-based collocators or at least 38,000 business access lines;"

(b) with respect to DS3 or dark fiber transport on routes connecting a pair of wire centers, "each of which contains at least three fiber-based collocators or at least 24,000 business lines." *Id.* at 2536.

market shares or earnings levels which, of course, are generally *not* consistent with competitive market conditions.

Antitrust-type competitive metrics, such as those embraced by the Bureau's Bulletin, should be used in place of existential "triggers" as the only legitimate means for demonstrating the sufficiency of competition as a condition for relaxing market regulation. "Triggers" and other existential approaches purport to predict competition from limited entry and frequently arrive at unsupported inferences about the sufficiency of competitive forces. Experience teaches that the "trigger" conditions lack anywhere near the level of predictive value that is attributed to them. The economic considerations that affect the CLEC's decision to deploy fiber optic facilities are *building-specific* and include such factors as (1) the cost of providing a lateral connection between the building and the CLEC's fiber ring, (2) the potential level of revenue available to the CLEC if it deploys facilities at that location, and (3) institutional barriers, such as the ability to negotiate for access rights with the building owner. Geographical proximity (i.e., having the same serving wire center) does not cancel out these key economic considerations. Thus, the fact that a CLEC has successfully deployed facilities to a particular building in a given wire center only shows that the economic conditions for deployment are satisfied with respect to *that particular building*. The same economic considerations may or may not apply to another building served from the same wire center. These building-specific economic considerations are all but ignored under the FCC's "trigger" approach.

### **A stable framework for ensuring economic competitor access to wholesale facilities needs to precede further forbearance from retail regulation**

Recently, the Minister of Industry issued an Order proposing to vary CRTC Telecom Decision 2006-15 (April 6, 2006), *Forbearance from the regulation of retail local exchange services* (the Local Forbearance Decision).<sup>8</sup> The variance would override the quantitative measurement of retail competition adopted by the CRTC (a market share test) and replace it with a framework that relies upon the presence of competitors (reminiscent of the FCC's "triggers" discussed above). While competitors and ILECs will have the opportunity to submit comments directly in response to the proposed variance, the prospect of significant changes in the framework for retail forbearance have immediate and compelling importance for the development of effective measures to safeguard the reliable availability of essential facilities at the wholesale level.

Significant facilities-based competition at the wholesale level is not realistic. Thus, having effective measures in place to prevent the abuse of dominance and to ensure that CLECs have economic access to wholesale facilities will establish the conditions for sustainable *retail* competition. Further relaxation of regulation of retail telecom services *prior to the implementation of*

---

8. *Order Varying Telecom Decision CRTC 2006-15*, Canada Gazette, Part 1, vol. 40, no. 150 (December 16, 2006) at 4312.

*adequate safeguards to assure unfettered and economic competitor access to wholesale services will invariably lead to ILEC remonopolization of both the wholesale and the retail sectors.*

The FCC, on the other hand, has adopted “presence”-based tests for wholesale as well as retail services, leaving CLECs without a foundation upon which to deploy their competitive services (unless they are prepared to undertake the impossible – the construction of ubiquitous duplicate local exchange network facilities). The derailment of retail competition in the US is largely attributable to the fact that the FCC relied upon putatively predictive tests rather than upon actual evidence in making its decisions regarding the treatment of the ILECs’ wholesale services.

Canada needs to avoid making this fundamental mistake. The best course to avoid replicating the devastating impact of the FCC’s and the US courts’ means of assessing the presence of effective competition in Canada would be to proceed without delay to implement strong incentives for the dismantling of all remaining barriers to wholesale access, and to *proactively* monitor the effectiveness of those measures with tangible competitive metrics. When and if it can be demonstrated that wholesale access is robust and secure, then (and only then) is the time ripe to consider forbearance with respect to retail local exchange services.

## **The Bureau’s overall approach is rooted in well-established antitrust principles**

### **The focus on “essential facilities”**

As discussed above, effective retail competition depends on all carriers having access to essential wholesale inputs. The Competition Bureau properly recognizes the potential stranglehold that vertically integrated dominant providers of wholesale services have vis-à-vis their non-integrated, non-dominant rivals:

The structure of the telecommunications industry is complex. Service providers often rely upon having access to important components of a competitor’s network to provide an end-to-end service to their customers. At the same time, their suppliers are often fully integrated service providers able to offer the same range of service and competing for the same customers. ...<sup>9</sup>

Where a provider of a wholesale service or interconnection competes at the (downstream) retail level with the purchasers of those wholesale services, it confronts a complex and often contradictory set of incentives. If the wholesale service is an essential input to a competing retail service provider, then by selling the wholesale service to its rival, the vertically integrated entity – particularly if it is a monopoly (or even duopoly) provider– risks sacrificing its own retail revenue (insofar as the

---

9. Bulletin, §1.2, at 1.

competitor uses the wholesale services to acquire its own downstream retail market share) and, thus, is disinclined to make the wholesale sale. This could well account for the resistance competitors have experienced in their attempts to purchase access from Canada's incumbent telcos.

If, however, there are several carriers who possess facilities-based networks, the possibility increases that each one may see a distinct gain from promoting its wholesale services so as to expand the use of its services in its own and in downstream provider retail services. Although the downstream retail provider will take some retail business away from the integrated firm from which it purchases wholesale service, it will also take business away from *other* integrated carriers as well, producing a win-win outcome for both the wholesale service provider and its downstream reseller. Where market conditions have induced facilities-based providers to vie for the opportunity to offer their wholesale service to downstream providers, that service would cease to meet the definition of an "essential facility" (since it would no longer be "an input that provides the firm controlling it with the power to lessen or prevent competition in a relevant downstream market").

But, importantly, the opportunity to purchase at wholesale cannot be a selective or sporadic condition. For the service to cease to be an "essential facility," downstream providers must be able to acquire the input in the required form and at each required location, from any of several willing and able competing suppliers (that is, none of whom view selling at wholesale as undermining their retail shares). In the case of wireline services, it is evident that having only one – or at most two – facilities-based providers (i.e., a monopoly or a duopoly) requires affirmative measures to ensure the availability of wholesale facilities. In Canada, even where the facilities-based cable provider and ILEC are engaged in retail competition, they are typically unwilling to facilitate *additional* retail competition by providing access to non-facilities-based competitors. Thus, experience shows – for wireless providers in much of Canada and ubiquitously for wireline providers – that where only one or two facilities-based firms serve a geographic or product market, the ability of such firm(s) "to lessen or prevent competition in a relevant downstream market" is substantial.

## **Market definition**

Market definition has always been a source of considerable controversy in telecommunications. Incumbents, seeking to portray their market shares as low as possible, tend to favor expansive market definitions that embrace often unrelated firms and even industries. Expansive market definitions, of course, obscure monopoly conditions that may persist in market segments relevant to specific downstream competitors (one can still drown in a lake that is on average only six inches deep). As the Bureau explains:

Defining the relevant product and geographic markets traditionally focuses on identifying competitors that are likely to constrain the ability of a firm to profitably raise price or otherwise restrict competition. Such competitors are identified by their provision of

alternative products or geographic sources of supply to which buyers would be willing and able to substitute if the price for the product were to rise above competitive levels.<sup>10</sup>

Based upon this understanding, the Bureau adopts a very narrow approach to defining relevant product and geographic markets:

The boundaries of a market for competition analysis are delineated using the “hypothetical monopolist” framework to determine the *smallest group of substitute products and the smallest region of production* that a firm must control such that a profit-maximizing firm (the hypothetical monopolist) would have an incentive to implement a small, but significant and non-transitory increase in price (referred to as a “SSNIP”) above competitive levels. The alleged anti-competitive acts effectively provide the initial candidate product and geographic market in which the acts have the potential to maintain or enhance market power. These acts also identify the time period during which it is alleged that the firm exercised any such market power.<sup>11</sup>

*Product market vs. geographic market definitions*

Both “product market” and “geographic market” definitions are relevant for antitrust analysis. “In assessing whether products are close substitutes for one another, what matters are the characteristics of the product and consumers’ ability and willingness to switch from one product to another.”<sup>12</sup> And with respect to geographic market definition, “what matters is the ability and willingness of consumers to switch from suppliers at one location to suppliers in another location in response to a SSNIP. A relevant geographic market consists of the smallest region within which a ‘hypothetical monopolist’ of all sources of supply that are regarded as close substitutes by buyers, could impose a SSNIP.”<sup>13</sup> Since it is unlikely that, in response to a SSNIP, a consumer would undertake to move his residence or that a business would move its premises to a location at which a lower-priced telecommunications competitor had a presence, this could lead one to conclude that the “relevant geographic market” for a fixed wireline telecom service is each individual building or address at which service is being demanded.

But the Bureau also allows for the possibility that, whereas the customer cannot be expected to move to a different location in response to a SSNIP, an entrant could in some cases begin offering service at that location in response to a SSNIP. In that regard, the Bureau notes that “a geographic market can be defined around the network of a dominant firm based on its overlapping footprint with

---

10. Bulletin, §2.1, at 4, emphasis supplied.

11. *Id.*, at 4-5.

12. *Id.*, §2.3, at 7.

13. *Id.*, §2.5, at 8.

competing networks that provide the relevant telecommunications services (i.e., *in assessing which locations have the same competitive alternatives, the Bureau includes potential competitors that can easily provide service to that location*).”<sup>14</sup> According to this construct, those portions of the incumbent’s geographic coverage that is not *presently* being served by competitors should still be included with the “relevant geographic market” if entrants “can easily provide service to that location.”

The Bureau is here applying a *supply-based* market definition, including locations (and, in principle, services as well) where barriers to entry are relatively low – i.e., where the *supply elasticity* is relatively high. But by focusing upon *individual* service locations, the Bureau loses the broader competitive picture: Even if a potential competitor can “easily provide service to that location,” unless the potential competitor can serve the *connectivity* needs of customers *at* that location, its nominal ability simply to “light” the building is of little consequence.

Telecommunications differs fundamentally from other types of services and commodities because its purpose is to provide *connectivity* among multiple locations (i.e., a network). With distribution services like water, natural gas, electricity, etc., a customer is only concerned about getting the service *at* a particular location; the fact that the same utility also serves other nearby or even distant locations is of no real importance from the customer’s perspective. But in the case of telecom, the value of the service arises from its ability to connect to other locations. Thus, the more extensive a carrier’s network, the greater the likelihood that the carrier will, in fact, have facilities available at both endpoints of any point-to-point connection that is requested by a prospective customer.

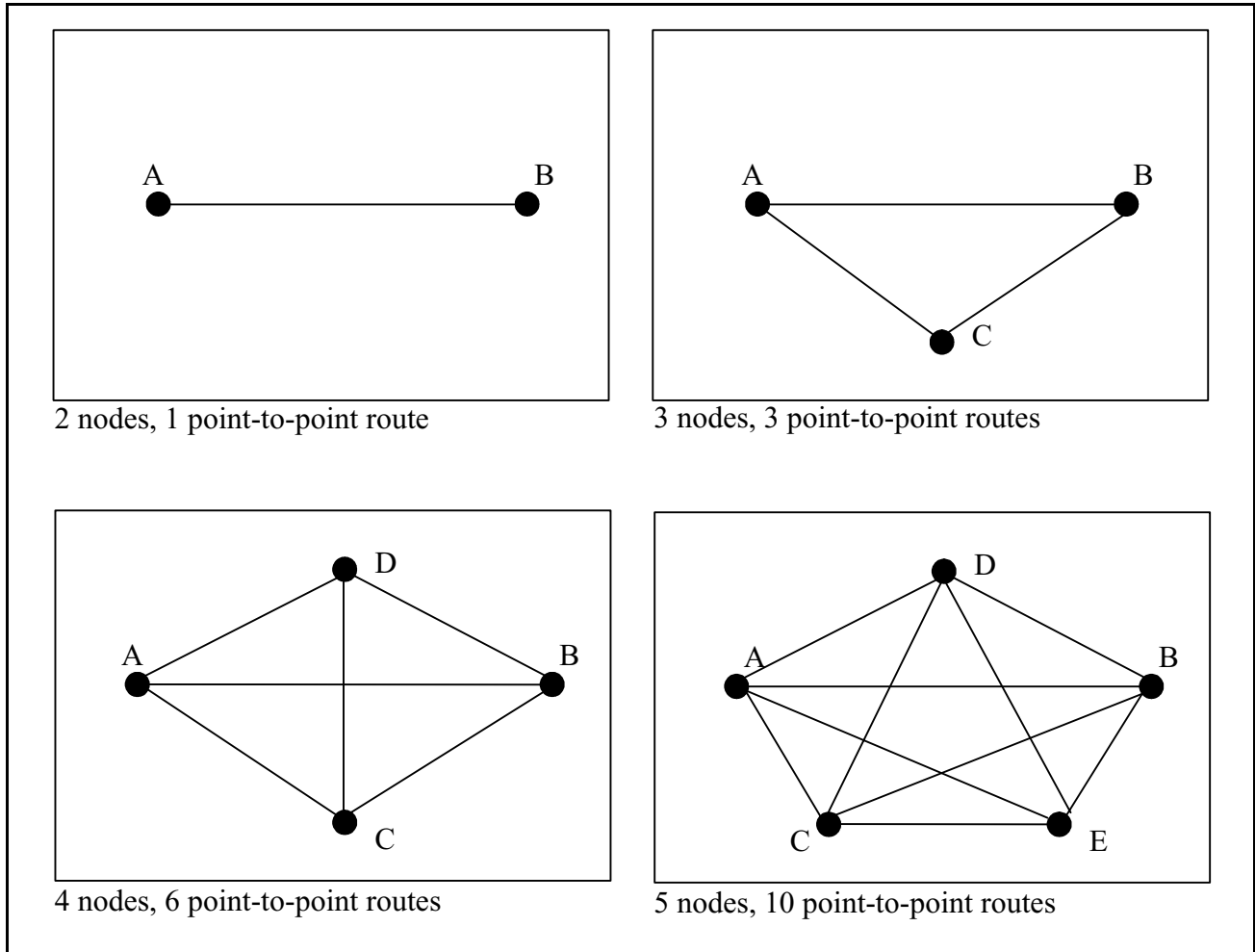
As shown in the diagrams in Figure 1 below, the number of potential point-to-point connections that can be created on a network increases exponentially with the number of individual “nodes” on the network. For example, only one possible point-to-point connection can be created on a network serving only two nodes (A-B). A network with three nodes can support three different point-to-point connections (A-B, A-C and B-C); a network with four nodes can support six different point-to-point connections (A-B, A-C, A-D, B-C, B-D and C-D), and so on. This relationship between the potential number of point-to-point connections (*C*) and the number of locations served by the network (*n*) can be stated as:

$$C = n(n-1) / 2$$

The physical presence of a competing carrier in a given building presents a competitive challenge to the incumbent only to the extent that the entrant is able to provide customers in that building with the connectivity they require between that building and other sites. Incumbent carriers with ubiquitous networks can almost always provide the required connectivity precisely because they serve virtually every building within their overall footprint. Where a carrier owns facilities to

---

14. *Id.*, §2.6, at 9, emphasis supplied.



**Figure 1.** The number of potential point-to-point connections that can be created on a network increases exponentially with the number of individual “nodes” on the network.

only a small fraction of the potential locations at which such connectivity might be required, it can compete with the ubiquitous incumbent only to the extent that it can obtain access to those locations where it *does not* have its own facilities deployed. The table below illustrates the importance of network extensiveness to competitive viability *in the absence of assured access to wholesale facilities of the incumbent*:

Table 1 Network Externalities Grow Exponentially as the Number of On-Net Nodes Increases	
Number of On-net buildings ( $n$ )	Possible Point-to-Point Connections ( $n(n-1)/2$ )
2	1
3	2
4	6
5	10
10	45
100	4,950
1000	499,500
10000	49,995,000

This is a critically important point and is one that is frequently overlooked in the analysis of network-based industries. Suppose that we are analyzing the market for coffee shops, such as Starbucks. Each individual shop serves a limited geographic market defined, for example, by how far a person will walk in order to get a cup of coffee. But as to the specific shop that serves each customer’s relevant geographic market, from the customer’s perspective the number and locations of other shops is largely unimportant. By contrast, in order for the presence of a CLEC in a particular building to matter to potential customers in that building, the CLEC must also have a presence in (or be capable of providing connectivity to) the other locations to which that customer requires connectivity.

These “network externalities” are a key source of market power and, in fact, are often created by companies with multiple service locations in order to increase their market power. Loyalty programs (e.g., airline mileage programs) are a good example, because they reward customers for staying within the same carrier across a large geographic area, such as the whole country. Pharmacy chains that provide computer networks enabling a customer to refill a prescription at any of their locations are another good example. In each of these cases, the more locations that an airline serves or the more stores the pharmacy chain operates, the more valuable its loyalty marketing program becomes. And in the case of telecom, it is these network externalities that make the incumbent’s wholesale services “essential facilities” from an entrant’s standpoint. In order for an entrant to compete with the incumbent, it must be capable of offering comparable connectivity. Thus, to whatever extent an entrant’s facilities-based network has less coverage than the incumbent’s ubiquitous network, that portion of the incumbent’s network that is not redundant to the entrant’s network is an *essential facility* that, by virtue of its control of that facility, would provide the incumbent “with the power to lessen or prevent competition in a relevant downstream market,” i.e., the retail market being served by the entrant.

*Supply-based market definitions*

The Bureau’s analysis focuses principally upon *demand-based* market definitions, looking at what *consumers* will do in response to a SSNIP. However, in the case of *fixed* wireline telecom networks, *supply* conditions are also critical to competitive market analysis – an area the Bureau’s draft touches upon only briefly.<sup>15</sup> Because supply conditions (formally, *elasticity of supply*) are of particular importance in *network-based* industries such as telecommunications and transportation, it would make sense to augment the proposed analytical framework with a supply-based market definition.

The advantage of using a supply-based approach in addition to a demand-based market definition is that it examines competitive conditions from both sides of the sale and purchase (supply-demand) equation. If the customer is unlikely to relocate in order to gain access to a competitor’s offering, then competitors must bring their offerings to the prospective customer. A competitor’s ability to do so will depend fundamentally upon the elasticity of supply that the competing firm confronts. If competitors confront relatively high supply elasticities, they will be able to rapidly respond to market opportunities by extending their service to meet potential customer demand. On the other hand, if such responses are impeded by high up-front investment requirements, protracted construction cycles, physical impediments (e.g., difficulties in obtaining rights-of-way and building access), unavailability of capital, and/or other barriers to entry, then the entrant will be precluded from responding to even a large price increase by the incumbent.

Table 2			
Most CLEC enterprise customers are being served using special access, even on streets where CLEC-owned fiber has been deployed			
City	All locations		SBC Spc. Access on streets with CLEC fiber
	SBC Spc. Access	CLEC fiber	
San Francisco (city wide)	1160	71	658
San Francisco (financial dist.)	719	68	436
Oakland	181	18	111
San Jose	95	24	63
Dallas	124	27	109

The extremely limited ability of competitors to expand their inventory of “lit” buildings is graphically demonstrated by a series of maps that SBC and Verizon had submitted to the FCC in the

15. See, e.g., Bulletin, §2.3, at footnote 24.

UNE *Triennial Review* and *Triennial Review Remand* proceedings in 2003. An example of such a map for the San Francisco financial district that was included in SBC's *ex parte* submission, is reproduced in Figure 2 below. An analysis of that map identified more than 436 instances where SBC special access services was being provided to CLEC customers located on streets where competitive fiber is in place.<sup>16</sup> Similar figures for several other SBC markets are summarized on Table 2.

As SBC's map and data demonstrate, competitors make extensive use of special access private line type facilities *leased from SBC itself* even on streets where competitive fiber optic facilities are in place. The reason: The cost of extending "lateral" fiber optic connections into individual buildings is sufficiently higher that, when combined with other physical impediments (including building access), such construction is simply uneconomic except in situations where the potential level of revenue is sufficiently high that such capital outlays are justified. The FCC, for example, has found that this level of revenue generally does not exist at buildings with fewer than three DS-3's of demand.<sup>17</sup>

This point is further corroborated by the recent GAO Report on the shortcomings of the FCC's "trigger" analysis and the predictive judgments with respect to special access competition.<sup>18</sup> The GAO found that

According to data from July 2006, facilities-based competitors have extended their networks to a relatively small subset of buildings in the MSAs that we examined. Of the

---

16. *SBC August 18, 2004 ex parte*, at Attachment A.

17. *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carrier*, CC Docket No. 01-338; *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98; *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket No. 98-147, *Report and Order and Order on Remand and Further Notice of Proposed Rulemaking*, FCC No. 03-36, 18 FCC Rcd 16978 (2003) ("*Triennial Review Order*") at paras. 320, 325. The US Department of Justice has reached a similar conclusion. See, Department of Justice *Complaints* in *United States v. SBC and AT&T*, Case no. 1:05CV02102, filed October 27, 2005, at para 28; and in *United States v. Verizon and MCI*, case no. 1:05CV02103, filed October 27, 2005 at para 28.

18. While the ILECs are quick to point to the deployment of isolated facilities by CLECs as a "trigger" for ending mandates to provide wholesale access, the ILECs' own failure to deploy competitive facilities out-of-region suggests that they are fully aware in practice of the challenges of profitable competitive entry. In fact, several major RBOC mergers were approved by the FCC on the condition that the merged entity step up its deployment of facilities out-of-region – but these conditions have been consistently disregarded. *Application of GTE Corporation, Transferor, and Bell Atlantic Corporation, Transferee; For Consent to Transfer Control of Domestic and International Sections 214 and 310 Authorizations and Application to Transfer Control of a Submarine Cable Landing License*, CC Docket No. 98-184, *Memorandum Opinion and Order*, 15 FCC Rcd 14032 (2000) ("*GTE/Bell Atlantic Merger Order*"), at 14182; *Applications of Ameritech Corp., Transferor, and SBC Communications Inc., Transferee, For Consent to Transfer Control of Corporations Holding Commission Licenses and Lines Pursuant to Sections 214 and 310(d) of the Communications Act and Parts 5, 22, 24, 25, 63, 90, 95 and 101 of the Commission's Rules*, CC Docket No. 98-141, *Memorandum Opinion and Order*, 14 FCC Rcd 14712 (1999) ("*Ameritech/SBC Merger Order*"), at 14877.

buildings with a level of demand greater than the DS-1 level in our model, we found that only about 6 percent of buildings, on average, have a fiber-based competitor.”<sup>19</sup>

Focusing specifically upon factors contributing to a lower supply elasticity, the GAO concluded that

... the limited amount of facilities-based competition could be due to a variety of factors, including the high cost of constructing local telecommunications networks, government regulations, and limited competitive access to buildings.”



**Figure 2.** SBC map of Downtown San Francisco showing CLEC enterprise customers being served using Special Access and CLEC “lit” buildings. Source: SBC *ex parte* letter dated August 18, 2004, FCC CC Docket No. 01-338.

19. GAO Report, at 18.

The GAO’s findings confirm that CLEC entry decisions are being made at two distinct geographic levels – a geographic scope of sufficient size to justify the deployment of a fiber ring or similar types of distribution network facilities and (given an affirmative entry decision as to the broader scope) on a building-by-building level.

A supply-based geographic market definition would thus imply a geographic scope somewhat larger than each individual building, in part because the cost of deploying facilities at any given location is heavily dependent upon that location’s proximity to other network facilities of the same carrier. Although the likelihood that a carrier will invest the funds necessary to “light” any given building is relatively small and is heavily dependent upon the potential revenue that it can expect to realize from such entry, all else equal, it will cost considerably more to enter a given building where a CLEC has no or limited network facilities within a given geographic area vs. the case where it has (by CLEC standards) extensive facilities currently in place.

US experience also provides other evidence of extremely low supply elasticities with respect to dedicated access type services. RBOC earnings on interstate special access services have been escalating in recent years, now reaching the high two-digit and even some three-digit rates of return levels (see Table 3). Yet despite these high profit levels, the number of “lit” buildings has not increased very much in that same time frame. Economic theory would suggest that if entry were easy and not subject to high entry barriers, rivals would expand supply in response to high incumbent earnings levels. The fact that this has not happened – and that incumbent earnings levels have not only remained high, but are actually still rising – confirms that elasticities of supply are far too low to present any sort of competitive discipline to the incumbents in the dedicated access sector.

Table 3					
RBOC Special Access Rates of Return					
	<b>BellSouth</b>	<b>Qwest</b>	<b>AT&amp;T/SBC</b>	<b>Verizon</b>	<b>All RBOCs</b>
2003	69.1%	68.1%	63.2%	23.5%	44.0%
2004	81.9%	76.8%	76.2%	31.6%	53.7%
2005	98.4%	109.4%	91.7%	41.6%	67.8%

Source: Federal Communications Commission, ARMIS Report 43-04, Access Report: Table I, YE 2005  
 Accessed April 25, 2006. Available at <http://www.fcc.gov/wcb/eafs/>

**Market Power Assessment**

*Price and profitability*

The Bureau’s analysis correctly reflects the premise that a firm’s ability to sustain excessive prices and profits over an extended period of time is an indication of market power:

... market power may be defined with respect to the ability of a firm to profitably cause one or more components of competition encompassed within the concept of price (i.e., price, output, quality, variety, service, advertising or innovation, etc.) to significantly deviate from competitive levels for a sustainable period of time (i.e., impose a SSNIP).<sup>20</sup>

In competitive markets, an attempt by any one firm to unilaterally raise prices above the competitive level will not be sustainable in part because the prospect of economic profits will induce other firms to enter the market and bid prices back down to the competitive level – i.e., toward cost. If, however, such entry is made difficult due to the presence of any of a variety of entry barriers – including the incumbent’s first mover advantage, capital investment requirements, time required to construct competing facilities, etc., then the incumbent will be capable of maintaining above-cost prices for an extended period of time. The *persistence* of significant price/cost gaps and the resulting economic profits over an extended period of time provides compelling and irrefutable evidence of the incumbent’s market power.<sup>21</sup> And the fact that high earnings levels can be sustained even where competitive “trigger” conditions have nominally been met must be interpreted as demonstrating the ineffectiveness of the “triggers” in identifying and measuring the extent and effectiveness of competition.

It is less clear, however, that the Bureau intends to follow its own counsel. The Bureau suggests that “[g]iven the difficulty inherent in measuring market power directly (due to a lack of direct evidence other than price, profit levels, and the conduct of the firm in question), the Bureau also relies upon a number of indirect indicators – both qualitative and quantitative – of market power.” Unfortunately, this hesitancy creates uncertainty about when the Bureau intends to use direct evidence in assessing the dominant incumbent’s market power and when it does not – and such uncertainty serves to deter entry and investment and so works to the benefit of the incumbent.

*The “indirect indicators”*

The “indirect indicators” to which the Bureau is referring include market share, barriers to entry, and certain other market characteristics, such as the nature and extent of technological change and the ability of entrants to exploit them. Even with respect to these indirect indicators, however, the Bureau appears to favor a fairly traditional antitrust approach, focusing upon *specific measures* rather than upon the type of indirect shadow evidence that supports the FCC’s “triggers” analysis.

---

20. Bulletin, §3.1, at 10.

21. This principle is discussed at length in the seminal work on this subject, *Market Power in Antitrust Cases*, William M. Landes & Richard A. Posner, 94 *Harvard Law Review* 937 (1981).

With respect to market share, “[t]he Bureau’s view is that high market share is usually necessary, but not sufficient, to establish market power,”<sup>22</sup> a position that is frequently – and not surprisingly – adopted by dominant firms with high market shares. However, the Bureau also acknowledges that “[i]n the contested abuse of dominance cases heard to date, the market shares of the dominant firms were very high, suggesting that in these instances *customers had few alternatives to choose from in the event that the dominant firm increased price above competitive levels.*”<sup>23</sup> This acknowledgment suggests that the Bureau continues to recognize that market share is a highly reliable (albeit not an exclusive) indicator of market power.

By contrast, in the US, where the FCC has adopted the incumbents’ position characterizing market share evidence as “historic” and not predictive, that agency has largely cast aside this highly telling measure of market power – and adverse consequences of this approach are already evident. Contrary to the revisionist approach that has been adopted by the FCC, and as the Bureau appears to acknowledge, high market shares do provide *prima facie* evidence of market dominance. To be sure, a high market share in the relevant product and geographic market is a *necessary* condition for a firm to exercise market power, but as the Bureau has itself recognized, the presence of one firm (or a small number of firms) with high market shares is itself strong evidence of a *lack* of viable competitive alternatives.

It is also important that market shares be calculated with respect to the carriers’ areas of market dominance. In the US, the RBOCs frequently refer to their respective shares of the *total US market*, seeking to conceal the fact that within their respective footprints – the geographic market for this purpose – their facilities-based shares are well into the high 90% range. This is of particular relevance in the situation in which the largest incumbents do not compete with one another outside of their respective geographic footprints, a condition that prevails in Canada between the two largest incumbent LECs – Bell Canada (including its various holdings in the Maritimes) and Telus. According to CRTC data for 2005, ILEC out-of-region activity in the business segment accounted for \$316-million in local revenues, as compared with just under \$3-billion in-region.<sup>24</sup> MTS Allstream, of course, likely accounts for a significant portion – perhaps even the majority – of these out-of-region ILEC business revenues. In 2005, for example, more than 55% of the \$2.02-billion in total MTS revenues, some \$1.12-billion, were derived from services provided by the MTS Allstream (National) Division, primarily outside of Manitoba.<sup>25</sup>

---

22. Bulletin, §3.2, at 11.

23. *Id.*, emphasis supplied.

24. *Id.*, Table 4.2.8.

25. MTS 2005 Annual Report, at 60..

Of particular note (again, given the US experience) is the Bureau's observation that

In determining whether a firm has the ability to exercise market power, the Bureau assesses whether one or more customers have a countervailing ability to constrain an exercise of market power. For example, large business customers (such as financial institutions) may be able to constrain the ability of a firm to exercise market power if these customers can switch to other service providers in a reasonable timeframe, vertically integrate their operations, induce the expansion of existing service providers, or encourage the entry of potential service providers.<sup>26</sup>

Yet in many respects, it is the large, multi-location decentralized customer that is the *most captive* to the geographically ubiquitous incumbent. Certainly this has been the experience of large users in the US, as ETI has documented in<sup>27</sup> a study we prepared for a group of large corporate telecom users, the Ad Hoc Telecommunications Users Committee, and submitted by Ad Hoc in a number of FCC proceedings. (The paper was also submitted by several parties in the so-called Tunney Act proceeding in U.S. District Court that is reviewing the SBC/AT&T and Verizon/MCI mergers.)<sup>28</sup>

Large, multi-location users require connectivity among many locations, and typically seek out a single-source solution. Thus, even if competitors are offering service at *some* of the individual locations at which the large user needs service, the competitor's offering will not be considered because the competitor cannot provide a single-source solution embracing all of the customer's needs. Further confounding entrants' efforts to break into the large user market is the practice of all of the large incumbents to offer their largest customers volume and term discount contract pricing plans that require the customer to give most or all of its business to that carrier, either as a condition for obtaining the maximum discount and/or in order to satisfy a Minimum Annual Commitment ("MAC"), the minimum annual spend that the customer is required to make with the carrier without incurring shortfall penalties. It would seem, then, that the notion that the largest customers may present countervailing market power ("monopsony power") to the incumbents is not borne out in actual practice.

Finally, the Bureau suggests that the presence of "[u]nused capacity enhances the incentive and ability of a service provider to compete for customers in response to a price increase by the allegedly dominant firm" and that "[w]hen substantial excess capacity remains in a market, allowing firms to easily increase supply in response to an increase in price, the ability to raise price above competitive

---

26. Bulletin, §3.4, at 12-13.

27. Economics and Technology, Inc., *Competition in Access Markets: Reality or Illusion. A Proposal for Regulating Uncertain Markets*, prepared for the Ad Hoc Telecommunications Users Committee, August 2004, Available at <http://www.econtech.com/AccessWhitepaper.pdf>.

28. U.S. District Court for the District of Columbia: *U.S. v. SBC Communications, Inc. and AT&T Corp.*, Civil Action No. 1:05CV02102 (EGS); *U.S. v. Verizon Communications Inc. and MCI, Inc.*, Civil Action No.: 1:05CV02103 (EGS).

levels may be considerably lower than what a simple concentration measure might suggest.”<sup>29</sup> This may well be accurate in long-haul markets, such as long distance trunk services and Internet backbone networks, where individual network links are available to and used by a large number of individual customers. However, in the case of *distribution* networks, such as local fiber optic lateral connections to “lit” buildings, the customer or customers at each such location typically utilize only a small fraction of the potential capacity that can be derived from the fiber facility, yet the excess capacity cannot be redeployed to serve – and is thus of virtually no use in serving – customers at other locations. To the extent that the Bureau’s statement is intended to apply to *all* telecom markets and not just to long-haul markets, the statement is simply incorrect.

### **Anticompetitive acts**

The Bureau draft identifies a series of anticompetitive acts that, severally and in combination, constitute an abuse of dominance. Principal among these are “acts to raise rivals' costs (or reduce rivals' revenues); predatory conduct; and acts to facilitate coordinated behaviour among firms (facilitating practices).”<sup>30</sup> While frequently and vehemently denied by US carriers, the presence of such conduct is pervasive across nearly all segments of the US telecom industry. Of particular note – and as we discussed at great length in *Avoiding the Missteps*,<sup>31</sup> US incumbents have aggressively and successfully utilized the regulatory process itself to facilitate their ability to engage in precisely this type of conduct. The efforts by Bell Canada and Telus to get the CRTC to narrow the scope of what constitutes “essential facilities” is, *in and of itself*, precisely the type of anticompetitive conduct that the Bureau has identified. Indeed, as the Bureau observes:

As noted in the *Enforcement Guidelines on the Abuse of Dominance Provisions*, a dominant firm may undertake a number of strategies that raise the costs of a rival, or reduce a rival’s revenues, thereby making the rival a less effective competitor. It may also engage in practices that have the effect of excluding competitors by hindering or denying current or potential rivals access to the inputs necessary to compete (market foreclosure). For example, it could exercise its market power over an input that its rivals need to compete (e.g., by exclusive contracts that deny rivals access to efficient distribution or retailing).<sup>32</sup>

---

29. *Id.*, §3.5, at 13.

30. *Id.*, §4.1, at 14.

31. Selwyn, Lee L. and Helen E. Golding, *Avoiding the Missteps Made South of the Border: Learning from the US Experience with Competitive Telecom Policy*, Economics and Technology, Inc., August 2006, at 4-7. Available at <http://econtech.com/missteps.pdf>

32. *Id.*, §4.2, at 14-15.

This is a key point and deserves emphasis. If the incumbents are ultimately successful in convincing the CRTC to *decree* that facilities that are essential for sustainable competition are no longer subject to regulation as “essential” facilities, the incumbents will be free to use their monopoly control of these facilities to raise rivals' costs (or reduce rivals' revenues), to engage in predatory conduct, and to engage in margin squeezing. The efforts by Bell and Telus with respect to the “essential facilities” issue themselves constitute coordinated behavior among these incumbents. Indeed, the very pendency of the CRTC proceeding discourages investment in competitive facilities that depend upon access to incumbent facilities, and diverts investor capital away from the competitive telecom sector. Even if the incumbents are ultimately unsuccessful in convincing the CRTC to adopt their position, they will still have succeeded in weakening their existing rivals and in foreclosing entry by new ones.

The US experience is particularly germane here. The passage of the *1996 Telecommunications Act* was made possible because it represented a political compromise that was accepted by a broad range of stakeholder interests, including in particular the RBOCs, the major IXCs (AT&T, MCI, Sprint), and numerous smaller CLEC and CAP entrants. Yet literally from the date that President Clinton signed the Act into law (February 8, 1996), the RBOCs commenced their efforts at extricating themselves from the various competitive concessions to which they had agreed. Having virtually unlimited lobbying and litigation resources, the RBOCs were assured an ultimate victory, leading to the collapse of competition in the US telecom market and to the reconcentration and remonopolization of the local and long distance markets.

*Raising rivals' costs and market foreclosure, margin squeezing, and predatory pricing*

Removal of a wholesale service from the list of “essential facilities” would clearly facilitate precisely the kind of anticompetitive conduct about which the Bureau has expressed concern. In the US, following the elimination of UNE-P, the RBOCs have offered “replacement” wholesale services to CLECs under so-called “commercial agreements” that have been “negotiated” between the ILEC and the CLEC at unregulated prices. (We place the word “negotiated” in quotation marks because the enormous market power imbalance between the RBOC and the CLEC has operated to make these “commercial agreements” more like “adhesion contracts.”) In many cases, the “wholesale price” for the UNE-P replacement actually *exceeds* the retail price of at least some of the RBOC services for which UNE-P (or its replacement) is used to compete. Special access pricing flexibility has similarly permitted the RBOCs to increase rates for these essential inputs to CLECs attempting to compete in the business/enterprise market.

This type of margin squeezing has been particularly effective in dismantling competition. Although a number of CLECs have entered into “commercial agreements” for UNE-P replacement services, few are aggressively marketing their retail services to new customers, choosing instead to pursue a “harvesting” strategy aimed at retaining the marginally profitable existing customers for as long as possible.

As wholesale access requirements in the US have been prematurely relaxed, the economic damage resulting from RBOCs' dominance are beginning to emerge in the form of significant price increases. For example, Verizon has just announced increases of \$5.04 in the monthly rates for optional residential flat-rate LATA-wide calling plans that include selected vertical features; these increases amount to between 15% and 18%, depending upon the plan.<sup>33</sup> For its part, SBC has introduced monthly charges of as much as \$5 applicable to residential customers who select a by-the-minute long distance pricing plan where it had previously not imposed any monthly fee.<sup>34</sup> Both Verizon and SBC (having obtained regulatory permission to discontinue selling stand-alone DSL to their competitors<sup>35</sup>) have begun to increase consumer DSL rates. In its northeast US service areas, for example, Verizon had been offering a basic consumer DSL service at \$14.95 per month with a one-year contract; within the past six months, that rate was increased, first to \$17.95, and just recently to \$19.95, i.e., a 33% increase. It is noteworthy that these price hikes are all well in excess of the "5% SSNIP" threshold that both the Competition Bureau and the US Department of Justice guidelines specify for assessing the presence of market power.<sup>36</sup>

The Bureau also refers to the anticompetitive practice of predatory pricing. "Predatory pricing involves a firm deliberately selling at below-cost prices for a sufficiently long period of time that a rival will be eliminated from the market or that competition will otherwise be diminished in the expectation that the firm will be subsequently able to recoup its losses by charging prices above competitive levels."<sup>37</sup> Predatory pricing is generally thought of in terms of *inter-temporal* profit flows – i.e., sacrificing profits in one time period to be recovered in a future time period after the rival firms have been eliminated. However, in the case of firms subject to rate regulation, the same predation effect can be achieved by using profits from regulated monopoly services to support the

---

33. Prior to the \$5.04 increase, the rates for the respective services were \$22.00 and \$27.00. Verizon New England, DTE MA No. 10, Exchange and Network Service, Part M Section 1, Page 71: compare Third Revision (effective July 6, 2006) with Fourth Revision (effective December 1, 2006).

34. In August of 2003, SBC was offering consumers its so-called ValueSaver plan, which allowed users to make long distance calls at a flat rate of 7 cents per minute with no monthly recurring charge. Now, according to AT&T's website, consumers wishing to purchase long distance service by-the-minute can select from two One Rate long distance plans, with either a 10 cent per-minute rate and a \$2 monthly recurring charge, or a 5 cent per-minute rate with a \$5 MRC. Compare, Southwestern Bell Communications Services, FCC - Voice Product Reference and Pricing Guidebook for Interstate Voice Services, Section 4, Interstate Switched Services Rates and Charges, at page 7 (as of August 2003); <http://www.att.com/gen/general?pid=7908> (accessed December 28, 2006).

35. *In the Matters of Appropriate Framework for Broadband Access to the Internet over Wireline Facilities* (and companion dockets), CC 02-33, 20 FCC Rcd 14853 (2005).

36. U.S. Department of Justice, *Horizontal Merger Guidelines* (1992), section 1.11: "In attempting to determine objectively the effect of a 'small but significant and nontransitory' increase in price, the Agency, in most contexts, will use a price increase of five percent lasting for the foreseeable future."

37. Bulletin, §4.3, at 19.

underpriced competitive services. The Bureau appears to recognize this point and its importance in the case of telecommunications:

... the incentives to engage in predation in one geographic market to either create a reputation or signal that entry into other markets would not be profitable may not exist if recoupment in those markets is not possible because of continued and effective regulation. On the other hand, if regulation allows costs of providing unregulated services to be passed on to customers of the regulated service, the regulated firm may have an unusually credible threat to predate in those unregulated markets by cross-subsidizing.<sup>38</sup>

Declaring monopoly wholesale services as “non-essential” and thus deregulating their pricing contributes to and encourages precisely this type of conduct. The incumbent can raise prices wherever competition is absent, and engage in highly targeted pricing to forestall competitive entry wherever it might otherwise surface – sort of like a game of *Whack-a-mole*, where the goal is to eliminate the competitor the moment it sticks its head out of the ground.

#### *Tests for predatory conduct*

There is, however, one troubling aspect of the Bureau’s discussion of predatory pricing – how the Bureau will determine whether a price is being set below cost. The Bureau proposes the following approach:

First, the Bureau would consider whether the alleged predatory price is likely to drive the complainant, or other firms, out of the market. In this context, the Bureau would assess whether the alleged predatory price is *below the average avoidable costs of the firm that is alleged being driven from the market*. The Bureau would also consider the likelihood of exit when costs are sunk, making redeployment of the assets to other uses difficult.

Second, if the first condition is satisfied, the Bureau would compare the alleged predatory price *to the alleged predator’s avoidable costs*. The Bureau is not likely to pursue a complaint where the alleged predator earns profits in that market at the alleged predatory price. As a general principle, *where a dominant telecommunications service provider’s response to competition consists only of reducing prices to levels which match, but do not undercut those of a competitor (“meeting the competition”), the Bureau will not take enforcement action when considering allegations of predation.*<sup>39</sup>

The Bureau does not, however, specify the *type* of “avoidable cost” that would be considered in this process. Once capital investment has been made and the facilities have been constructed, the only

---

38. *Id.*, at 20.

39. *Id.*, emphasis supplied.

“avoidable cost” – at least in the short-run – is limited to that associated with the ongoing operation and maintenance of the facility. If by its use of “avoidable costs” the Bureau intends to ignore sunk capital costs, that would be rather problematic.

Incumbents and facilities-based entrants are constantly making capital investments in facilities – particularly for the purpose of providing service at a new customer location. Because incumbents’ networks are designed and constructed to serve all customers in a given area, they tend to make fewer customer-specific investments than do smaller entrants. As a result, considerably less of an incumbent’s costs are “avoidable” when a given customer discontinues service. An incumbent’s *avoidable cost* will almost always be less than an entrant’s avoidable costs whenever the entrant has yet to commit capital to serve a specific customer. If incumbents are allowed to price on the basis of *their* own avoidable costs, their predatory pricing would not be considered as such by the Bureau. A more appropriate standard for this purpose would be some form of long run incremental cost, such as TELRIC.

### *Bundling*

The Bureau has appropriately identified bundling as a separate potential basis for anticompetitive pricing. Bundling of several products and services into a single pricing package has long been viewed as a source of anticompetitive abuse, since it has the effect of foreclosing entry into the market for a “tied” service. Economists and antitrust courts have long understood that market power in one industry segment can reduce competition in adjacent, otherwise competitive markets. For example, this issue has been at the forefront of antitrust concerns in the US and in the EU, wherein it is alleged that Microsoft’s practice of bundling various layered software products (e.g., web browsers, antivirus software, media viewers, and potentially others) into *Windows* operates to foreclose competition in the markets for those products.<sup>40</sup>

In the US, the RBOCs adopted a bundling strategy almost immediately upon gaining reentry into the long distance market. They tied their monopoly local service with competitive long distance services into “all distance” packages. Through this device, they quickly eliminated the market for “stand-alone long distance” services (a major revenue source for IXC’s such as pre-merger AT&T and MCI, who were also the emerging CLECs). Since entry costs, coupled with constraints on wholesale access, made it impossible for these IXC-CLECs to create cost-effective bundles of their own, these formerly strong long-distance competitors were quickly forced out of the consumer market. As facilities-based incumbents continue to broaden their range of offerings, the potential anticompetitive risks associated with bundling are only likely to grow.

---

40. See, e.g., *United States of America v. Microsoft Corporation*, Civil Action No. 98-1232 in US District Court for the District of Columbia, Direct Testimony of Franklin M. Fisher, January 5, 1999, at para. 55, noting, “[a monopoly firm] may choose to exercise its power to gain an advantage or even a monopoly in a second market.”

## **Conclusion and Recommendations**

The Competition Bureau is proposing a sound and principled approach to the analysis of competition and the potential for abuse of dominance by incumbent telecommunications carriers. Antitrust enforcement of the type being contemplated in the Draft Bulletin operates as a deterrent to anticompetitive conduct only to the extent that incumbents perceive the risks and nature of remedial measures to be of sufficient economic consequence as to constrain their exercise of the extensive market power that they currently possess. Absent such deterrent effects, *ex post* antitrust enforcement may be too little, too late to prevent entrants from being forced out of business and the consequent lessening or elimination of competition.

The Bureau has developed and proposed an appropriate and potentially effective regulatory frame, but to be effective it needs to be implemented and applied as a means for foreclosing incumbents' abuse of dominance before any such conduct arises. That function may fall more within the scope of CRTC regulation than the Bureau's antitrust enforcement responsibilities. Nevertheless, the Bureau has developed a framework that is amenable and adaptable to *ex ante* regulation, and should urge its adoption by the CRTC as well.

## The Authors

**Lee L. Selwyn** is President and founder of Economics and Technology, Inc. He is an internationally recognized authority on telecommunications economics, regulation, and public policy. Since founding ETI in 1972, Dr. Selwyn has advised a broad range of telecom industry stakeholders – regulatory agencies, consumer advocates, large corporate telecom users, and a number of competitive local and interexchange carriers – on a variety of telecom policy issues, including technology, rate design, service cost analysis, market structure, form of regulation, affiliate transactions, universal service, access charges and intercarrier compensation, and taxation of telecommunications services. He has appeared as an expert in a number of CRTC proceedings, at the US FCC, the US Congress, and before more than forty state commissions across the US. He has served as a consultant to the CRTC on several occasions, and was an invited speaker at the Canadian Telecommunications Policy Review Forum in Ottawa in October 2005. Dr. Selwyn holds a Ph.D. in Management from the Alfred P. Sloan School of Management, Massachusetts Institute of Technology; a Master of Science in Industrial Management, MIT; and a B.A. with Honors in Economics from Queens College of the City University of New York.

**Helen E. Golding**, Vice President at ETI, has over twenty-five years experience in the utilities field. At ETI, Ms. Golding has managed and participated in a broad range of projects involving the transition from regulation to competition, including incentive regulation, interconnection, universal service and access charge reform, and the public interest review of mergers and BOC long distance entry requirements. Ms. Golding also has an extensive public sector background, having worked at the FCC and as Assistant General Counsel and Acting General Counsel at the Massachusetts Department of Public Utilities. Prior to joining ETI in 1994, Ms. Golding's other private sector employment included a private law practice specializing in telecommunications and public utility regulation, and as Telecommunications Counsel at Honeywell Inc. She holds a J.D. from Boston University School of Law; and an A.B. cum laude, from Bryn Mawr College.

**Economics and Technology, Inc.** has been primarily and continuously engaged in the telecommunications policy field for nearly thirty-five years. ETI has participated in more than 500 regulatory and policymaking proceedings in more than forty states, at the FCC, the CRTC, and in a number of other countries. The firm has served as consultants on a broad range of policy and ratesetting issues to the CRTC, to numerous state utility commissions and state consumer advocacy agencies across the US, as well as to numerous corporate, government, consumer and competitive carrier clients.

**ECONOMICS AND TECHNOLOGY, INC.**

**BIBLIOGRAPHY OF PUBLICATIONS AND REPORTS  
ON CANADIAN TELECOMMUNICATIONS POLICY ISSUES**

*Avoiding the Missteps Made South of the Border: Learning from the US Experience in Competitive Telecom Policy*

prepared for MTS Allstream Inc. as an attachment to its submission in response to the *Order under Section 8 of the Telecommunications Act – Policy Direction to the Canadian Radio-television and Telecommunications Commission*, August 16, 2006.

*Establishing Effective Local Exchange Competition: A Recommended Approach Based Upon an Analysis of the United States Experience*

prepared for the Canadian Cable Television Association, submitted to the Canadian Radio-Television and Telecommunications Commission, *Local Interconnection and Network Component*, Public Notice CRTC 95-96, January 26, 1996.

*Cable Television Competition in Canada: Achieving Economic Efficiency and Other Policy Goals for Canada's Information Highway*

prepared for the Canadian Cable Television Association, submitted to the Canadian Radio-Television and Telecommunications Commission, *Information Highway*, Public Notice 1994-130, January 16, 1995.

*Pricing and Policy Issues Affecting Local/Access Service in the U.S. Telecommunications Industry*

prepared for the Canadian Radio-Television and Telecommunications Commission, December 1992.

*A Study of National Telephone Contribution Mechanisms - Final Report*

prepared for the Canadian Radio-Television and Telecommunications Commission, March 29, 1991.

*A Study of Rate of Return Regulation and Alternatives: An Examination of Applicability to Regulation of Telephone Companies by the Canadian Radio-television and Telecommunications Commission*

prepared for the Canadian Radio-Television and Telecommunications Commission, March 31, 1989.

*Competition in the U.S. Long Distance Telephone Industry: A Study of the Impacts on Telecommunications Carrier Operations*

prepared for the Canadian Radio-Television and Telecommunications Commission, March 17, 1988.

*The Costs of Local Measured Service Exceed its Benefits: a Report on Recent U.S. Experience*

presented at a conference sponsored by Canadian Radio-Television and Telecommunications Commission and the Centre for the Study of Regulated Industries, McGill University, Montreal, Québec, May 2-4, 1984.

**EXPERT TESTIMONY SUBMISSIONS IN  
CANADIAN REGULATORY PROCEEDINGS**

*Telecom Public Notice CRTC 96-26, Forbearance from Regulation of Toll Services Provided by Dominant Carriers*, on behalf of AT&T Canada Long Distance Services Company, Call-Net Enterprises Inc., ACC TelEnterprises Ltd., fONOROLA Inc., Westel Telecommunications Ltd., filed November 26, 1996.

Witness: Lee L. Selwyn  
Helen E. Golding

*Price Cap Regulation and Related Issues*, Docket No. CRTC 96-8, on behalf of the Canadian Cable Television Association, filed August 23, 1996

Witness: Lee L. Selwyn

*AGT Limited General Rate Application 1996/97*, AGTRATE on behalf of the Canadian Cable Television Association, filed July 11, 1996.

Witness: Lee L. Selwyn

*Order in Council 1994-1689, Public Notice CRTC 1994-130 (Information Highway)*, on behalf of Canadian Cable Television Association, filed January 16, 1995, cross-examination March 10, 1995.

Witness: Lee L. Selwyn

*Telecom Public Notice CRTC 94-52, Implementation of Regulatory Framework - Split Rate Base, 1995 Contribution Charges, Broadband Initiatives and Related Matter: Telecom Public Notice CRTC 94-56, Implementation of Regulatory Framework - Stentor Broadband Initiatives and Canada U.S. Cost Comparisons; Telecom Public Notice CRTC 94-58, Implementation of Regulatory Framework - Issues Related to Manitoba Telephone System and Reconsideration of Rate Rebalancing*, on behalf of Unitel, Expert Report filed January 31, 1995

Witness: Lee L. Selwyn

Manitoba Telephone System 1991/1992 General Rate Application, Manitoba Public Utilities Board, on behalf of the Manitoba Public Utilities Board Staff, Direct Testimony filed March 28, 1991.

Witness: Lee L. Selwyn

*Considerations and Alternatives for Adapting Price Cap Regulation to Gas Metropolitan, Inc.*, Province de Québec Régie Du Gaz Naturel, Docket No. R-3173-89, on behalf of Industrial Gas Users Association, Expert Report filed February 28, 1991.

Witness: Lee L. Selwyn

*CRTC "Cost Enquiry" proceeding*, on behalf of CNCP Telecommunications, filed March 19, 1982.

Witness: Lee L. Selwyn