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**Telecom Competition in Canada and the U.S.:
The Tortoise and the Hare**

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Abstract

While the United States began the process of introducing competition into local telecommunications before Canada, there are important differences in the approaches chosen by the two countries. The U. S. approach is based on public utility concepts, while the Canadian approach is based on antitrust and economic principles. This paper shows that, as a result, Canada is likely to have widespread facilities-based competition for local telecommunications services before the U. S.

Introduction

Many governments and telecommunications regulators around the world have already permitted competition in a variety of telecommunications services and are now taking actions to introduce competition into the local switched voice telecommunications market. This market, like the long distance, enhanced services and terminal equipment markets before it, often had regulatorily-imposed barriers to competition and was, until recently, believed to be a natural monopoly market. In the United States, a number of the states have been introducing competition into local telephone service for several years. The U. S. Congress, with great fanfare, passed the *Telecommunications Act of 1996*, with the stated purpose of promoting

¹ The authors both participated, on behalf of TELUS Corporation (the Alberta, Canada, incumbent telephone company) and Stentor (the affiliation of Canadian incumbent telephone companies) in the local competition proceeding before the Canadian Radio-television and Telecommunications Commission which led to Decision 97-8 issued on May 1, 1997. The authors have also served as consultants to TELUS on a variety of related issues, and they have benefited from numerous discussions with TELUS employees and consultants. The authors also wish to thank James Smallwood for assistance with the preparation of this paper.

competition and reducing regulation in order to achieve lower prices, higher quality services and rapid deployment of new technologies for Americans.² It set out, in considerable detail, the way in which the local markets were to become competitive, and the FCC implemented the provisions of the Act with a series of even more complex and detailed orders.³

At the time the *Telecommunications Act of 1996* was passed, the Canadian Radio-television and Telecommunications Commission (CRTC) was engaged in a regulatory proceeding to establish rules for the introduction of local competition in Canada. The CRTC released its decision on May 1, 1997.⁴ While long distance competition began in the U. S. in the 1970s, it was not until 1990 that the CRTC permitted some long distance resale and 1992 that the CRTC permitted facilities-based long distance competition. Canadians were slow off the mark but the speed with which long distance competition developed exceeded all projections. The story with local competition is similar. While many states began introducing competition into local telecommunications markets some years ago, the CRTC declared the local markets open to facilities-based competition in 1994 and took until 1997 to issue an order setting out the rules and establishing the target date for implementation of January 1, 1998. The models used in the United States and in Canada are quite different, however. This paper argues that although the

² See Joint Statement of Managers, S. Conf. Rep. No. 104-230, 104th Cong., 2d Sess. Preamble (1996) (Joint Explanatory Statement); see also 47 U.S.C. § 706 (a) (encouraging the deployment of advanced telecommunication capability to all Americans).

³ FCC, Implementation of the Local Competition Provisions of the Telecommunications Act of 1996 and Interconnection between Local Exchange Carriers and Commercial Mobile Radio Service Providers, CC Docket No. 96-98 and CC Docket No. 96-185, August 8, 1996, First Report and Order, FCC 96-325; FCC, Federal-State Joint Board on Universal Service, CC Docket No. 96-45, May 7, 1997, Report and Order, FCC 97-157; and FCC, Access Charge Reform, Price Cap Performance Review for Local Exchange Carriers, Transport Rate Structure and Pricing, and End User Common Line Charges, CC Docket No. 96-262, CC Docket No. 94-1, CC Docket No. 91-213, and CC Docket No. 95-72, May 7, 1997, First Report and Order, FCC 97-158.

⁴ Canadian Radio-television and Telecommunications Commission, "Local Competition," Telecom Decision 97-8, May 1, 1997.

United States began the race to a fully competitive telecommunications market quickly and took a big lead on Canada, the Canadians, by working slowly and methodically through the competition principles will cross the finish line first while the United States languishes in the shade tree of the *Telecommunications Act of 1996*, a shade tree which distorts the notion of competitive telecommunications to such an extent that it may actually entrench monopoly and market power in the local networks of the incumbent local carriers.

In order to explain why this is the inevitable outcome of the two countries' policies, this paper will first explore what competition is, what a truly competitive telecommunications market might look like, and what regulatory or deregulatory policies need to be in place so that full local competition can emerge. The paper will then illustrate the connection between the development of competitive markets and regulatory policy by analyzing "competitive" policies in the United States and Canada.

The Nature of Competition

Competition means that in a particular market there are enough buyers and sellers so that no one has significant market power, i.e., no one can significantly affect the price or terms and conditions of service in the market. In a reasonably or workably competitive market, sellers may have some market power, but not significant market power. In this context, significant is a subjective measure, but one way of looking at it, in addition to more traditional approaches, might be that the alternative of regulation would result in poorer industry performance, and fewer benefits to consumers, than would an unregulated market. Indeed, the FCC has considered this balancing between regulation and deregulation and stated that deregulation should occur

where the benefits of regulation are outweighed by the costs of regulation.⁵ When such a point is reached, the market might well be called workably competitive.

In telecommunications, it is important to distinguish between facilities-based competition and services competition (or competition arising through the resale of the incumbent's facilities and/or services). This is so because there is a tendency among policy makers to measure the success of competition policy by counting competitors rather than by observing market outcomes. One can certainly create the illusion of full competition by quickly creating regulatory incentives for resale and pointing to all the "competitors" in the market. But a truly competitive telecommunications market must include competition in the provision of infrastructure, or the underlying network – in other words, facilities-based competition. If competition is only effected through the resale of the incumbent's underlying network elements and services, then all providers will become dependent on the incumbent's infrastructure and there will be little or no competition for the underlying facilities. Although choices of service provider will be available to end-user customers, competition will be limited to the retailing function only. If unbundled network facilities are combined with some of the entrant's own facilities in order to provide local service, then competition is extended to more elements of the provision of local service. The greater the incentives for new entrants to construct their own facilities (or the more effective is the removal of disincentives to do so), the more facilities will be built and the more new entrants will seek to lower their costs and differentiate themselves through new services and technological innovation. In turn, this will result in a more

⁵ FCC, Regulatory Treatment of LEC Provision of Interexchange Services Originating in the LEC's Local Exchange Area and Policy and Rules Concerning the Interstate, Interexchange Marketplace, CC Docket No. 96-149 and CC Docket No. 96-61, April 18, 1997, Second Report and Order in CC Docket No. 96-149 and Third Report and Order in CC Docket No. 96-61, FCC 97-142, Section I. par. 6.

competitive market that will deliver more benefits of competition to consumers and the economy as a whole.

Of course, it is important to recognize that competition itself is not actually the goal or objective. It is the policy vehicle through which the expected benefits of competition, including lower costs, lower prices, more research, development and innovation, increased customer responsiveness, improved price/quality combinations, and other similar benefits, are most fully and efficiently achieved. It is common, however, to strive for competition, and to refer to the objective of achieving competition as short-hand for achieving the benefits of competition, and the objective of competition is used in that way in this paper as well.

Competition and Regulatory Policy

The first and perhaps most important point to recognize about competition is that it is fundamentally at odds with economic regulation (i.e., the regulation of prices, terms and conditions of service, obligations to provide service and quality of service monitoring). In other words, if a market is regulated, it cannot be truly competitive. This leads to two conclusions. First, to achieve the objective of competitive telecommunications markets, markets must be deregulated when at all possible. Second, if significant regulation persists, markets may not look competitive and, therefore, regulators will not consider deregulation to be in the public interest (however defined). This circularity, if it is not broken by deregulation when the market would, in fact, be competitive in the absence of regulation, may prevent competition and its attendant benefits from actually arising.

The second and perhaps equally important point is that policies designed to introduce competition into formerly monopoly markets must be based on the economic and legal principles

of competition rather than the policies of public utility regulation. Public utility status and the accompanying regulation arose because of the presence of two conditions -- natural monopoly and the essentiality or importance of the service to the public. Since the natural monopoly condition that gave rise to public utility status has disappeared, so too must the public utility-style regulation which was developed to deal with that condition. Since competition can now arise in local telecommunications, it is competition law and economic principles that must guide the development of competition.

As telecommunications regulation is changed so that local competition can be introduced, some aspects of the new policy are of particular importance in the determination of how competition will or will not develop. This section of the paper will consider two key aspects of this new policy: (1) the degree of mandated unbundling and the pricing of unbundled facilities and (2) mandated resale of local service and any wholesale discounts. The next section of the paper will explore the competitive consequences of alternative Canadian and U. S. policies. First, however, it is helpful to re-iterate the distinction between interconnection and unbundling, because a failure to appreciate this distinction may also have an effect on the development of competition, even though both Canada and the U. S. accept the need for the interconnection of competing local networks.

Interconnection and Unbundling

Interconnection is the connection of all local telephone networks so that the customers of any carrier are able to call the customers of any other carrier. Interconnection, as the expression is used in this paper is simply the provision by each carrier of the call termination function at its end office local switch. Unbundling, on the other hand, while it requires the connection of

facilities to accomplish, is the provision of piece parts of one carrier's network to another carrier in order to allow the second carrier to construct its network using piece parts of the first carrier's network. Once the second network is constructed in this fashion, it must also be interconnected with the first carrier's network so that calls can be exchanged between customers on the separate networks.

It is important to make the distinction between unbundling and interconnection because two completely different policies underlie the decisions to mandate unbundling and to mandate interconnection. The rationale for unbundling finds its roots in the competition law principle of essential facilities, not the public policy principle which justifies mandated interconnection.⁶ In the case of interconnection, the policy rationale is simply to ensure that all customers, regardless of the local carrier they choose, must be able to call and receive calls from all other customers.

This distinction was made and applied by the CRTC in Canada and is also made, although not as cleanly, by the Telecommunications Act of 1996. The problem is that the *Telecommunications Act of 1996* does not employ the expression "interconnection" consistently. For example, in section 251, the Act imposes a general interconnection requirement on all carriers. It also requires all LECs to provide interconnection at any technically feasible point in the network for the transport and termination of traffic. The FCC concluded that the first type of interconnection simply referred to the physical connection between facilities of carriers. The second type of interconnection, for transport and termination, was recognized by the FCC for what it really is, unbundling. The FCC was confronted by this reality when it discovered that unbundled transport and transport for call termination were one and the same thing and,

⁶ It is possible to use the essential facilities doctrine to justify the requirement that all carriers provide the call termination function to all other carriers. However, this idea has problems of its own. These are discussed in Willie A. Grieve and Stanford L. Levin, "Common Carriers, Public Utilities and Competition," *Industrial and Corporate Change*, Vol. 5, No. 4, 1996, pp. 993-1011.

therefore, had to be provided at the same price by the ILECs.⁷ Therefore, even though the language employed by Congress was unclear, the FCC sorted it out by requiring each carrier to provide the call termination function to each other carrier at the local switch serving the called customer and by recognizing that transport is really an unbundled service that could be competitively provided.

Nevertheless, the confusion persists because Congress employed the “interconnection at any technically feasible point in the network” expression to describe the interconnection duty imposed on the ILECs. In order to make sense of the expression, the FCC listed a number of technically feasible points of interconnection, which are all, in reality, the provision of unbundled transport and/or switching with the call termination function. This is unfortunate since it distorts the concepts. Clearly, if one connects to an unbundled local loop on the customer side of the main distribution frame, no “interconnection” has taken place because that customer cannot call customers on the first network unless the carrier taking the unbundled loop also interconnects with the local switches of the first carrier in order to exchange calls. Therefore, the expression “interconnection at any technically feasible point in the network” is revealed to be either a meaningless expression or nothing more than another way of mandating that everything be unbundled.

Mandated Unbundling and the Price of Unbundled Facilities

With the prospect of the introduction of local competition, potential competitors typically argue that they need to be able to purchase any portion of the incumbent carrier’s local network

⁷ FCC, Implementation of the Local Competition Provisions of the Telecommunications Act of 1996 and Interconnection between Local Exchange Carriers and Commercial Mobile Radio Service Providers, CC Docket No. 96-98 and CC Docket No. 96-185, August 8, 1996, First Report and Order, FCC 96-325, Section XI. A. 2. c. (1).

so that they can establish their own services. The first competition question is how much mandatory⁸ unbundling the incumbent carrier should be forced to undertake. This question has been debated and answered by antitrust or competition law. The answer is clear. Only essential facilities should be subject to mandatory unbundling. Essential facilities can be defined as follows.

An essential facility is a monopoly-supplied facility, function, process, or service which competitors require as an input in order to provide telecommunications services and which competitors cannot economically or technically duplicate.⁹

If a facility is essential, a potential competitor cannot compete without the use of such a facility. Further, the market for that facility cannot be competitive. Therefore, the terms upon which the essential facility is provided to competitors, including its price, must be regulated.

Problems arise, however, when mandated unbundling goes beyond essential facilities. In that case, incumbent local carriers are forced to make available to competitors facilities which could be provided by alternative suppliers or which could be economically self-supplied by the would be competitor. Economically supplied means that the cost incurred by the alternative supplier entering the market at minimum efficient scale would be no higher than the cost incurred by the incumbent to supply the facility.¹⁰ In other words, the facility or service in

⁸ The mandatory nature of this unbundling is key. Incumbent carriers may choose to make available portions of their facilities or services on a voluntary basis based on their analysis of the business opportunity and competitive conditions in the facilities market. Such voluntary unbundling is not at issue. Only when regulators mandate that the incumbent make available certain facilities or services to competitors does the economic and public policy question arise.

⁹ Willie A. Grieve and Stanford L Levin, "Local Exchange Interconnection and Network Component Unbundling," presented at the International Telecommunications Society Workshop on Interconnection, Wellington, New Zealand, April, 1995.

¹⁰ If minimum efficient scale in a market is greater than 50% of the market, the would-be competitor would not be able to enter and compete unless it substantially supplanted the incumbent. In this case, the incumbent would not be operating at minimum efficient scale and competition would not be self-sustaining.

question must exhibit the properties of natural monopoly. So, where public utility regulation focussed on the natural monopoly provision of essential services to end-users, the idea of regulating essential facilities focuses on the provision of natural monopoly-supplied facilities to competitors so that competition can arise in the remainder of the services and facilities necessary to provide service.

While there is a public policy concern in ensuring that essential facilities are made available to competitors, there is also an important public policy concern in ensuring that competitors not be forced to share their non-essential facilities with their rivals in the market. If incumbents are forced to make non-essential facilities available to their competitors, they have little incentive to engage in research and development and innovation, as any market advantages they might hope to capture from taking such initiatives would become immediately available to their competitors as well. Mandatory unbundling, therefore, that goes beyond essential facilities provides incentives to incumbent carriers that are antithetical to the emergence of the benefits of competition. The incentives are to curtail research and development and innovation in the production of the facilities (or alternatives to those facilities) which they are mandated to share. Indeed, Areeda argues that it is the recognition of the innovation-chilling effects of such a policy that is one of the fundamental rationales for the development of the essential facilities doctrine and the need to limit mandated sharing (unbundling) to essential facilities properly defined.¹¹

While the decision to mandate the unbundling of non-essential facilities is, itself, anti-competitive, the regulated price at which these unbundled facilities must be made available to competitors also has important competitive consequences. Telecommunications carriers have a cost structure that includes shared and common costs due to the multi-product and network

¹¹ Areeda, Phillip. "Essential Facilities: An Epithet in Need of Limiting Principles." Antitrust Law Journal. Vol. 58, Issue 3, pp. 838-888.

nature of the services they provide. As such, if a carrier sold every service at incremental cost, the carrier would not be able to cover its total costs as some or all of the shared and common costs would most likely not be covered. In this situation, unbundled facilities should not be sold at incremental cost but, rather, at incremental cost plus a mark-up to cover some shared and common costs. There are two reasons for this. First, such pricing will be more efficient because it will approximate the price that would be charged in a competitive market. Second, such pricing will not stifle the emergence of competition or create the appearance of an essential facility when one does not or no longer exists. If an unbundled facility were priced only at incremental cost, it would always be more attractive to purchase the unbundled facility from the incumbent at incremental cost, because any other service provider's price would necessarily have to be higher in order to cover some portion of that provider's shared and common costs. Pricing unbundled facilities at incremental cost would result in at least some of the facilities appearing to be essential because of the absence of competitors, and it would stifle the emergence of competitors in the facilities market due to the artificially low price for the unbundled facility.

Both the mandatory unbundling of non-essential facilities and too-low pricing for these unbundled facilities are, then, anti-competitive, as such policies discourage the entry of competitors into the market who might offer service through their own facilities in competition with the incumbent carrier. Widespread mandatory unbundling, therefore, actually entrenches the incumbent carrier's monopoly or market power in the network and perpetuates regulation instead of permitting competition to arise.

Resale of Local Exchange Service

Potential local exchange competitors have argued forcefully that they should be able to buy local exchange services from the incumbent carrier at a discount from retail rates and then resell it to precisely the same customers for whom the retail rate was originally developed. Such a policy, in effect, mandates the creation of wholesale local exchange service tariffs unlike anything that has been mandated before and certainly unlike anything that one observes in non-regulated competitive markets.

While firms in competitive markets have the option of deciding whether to allow resale of their products or services, telecommunications firms have generally been required by regulation to permit resale of their services by resellers purchasing those services at tariffed rates also available to retail customers. Mandating resale, however, is inconsistent with competitive markets, where suppliers would determine, based on an analysis of the business case, whether or not they wanted to allow the resale of their services. In this sense, mandating resale has much the same consequences as mandating the unbundling of non-essential facilities. Once again, there is little incentive to invest in innovation and research and development if all new innovations must be made available to one's competitors.

The rationale for mandated wholesale discounts, as opposed to an incumbent carrier voluntarily entering the wholesale market, or being mandated to make its local service available for resale at the retail rate, has never been clear. It seems to rely on the assumption that this somehow brings or hastens the achievement of competition in the market. While it does mandate some version of competition for the retailing function, this type of competition is unimportant compared to the competitive benefits of pervasive facilities-based competition. Potential entrants have argued that they need a certain size of discount off of the retail rate so that they can profitably re-sell local service, although why they should be able to do this at a profit has never

been made explicit. Entrants may want to provide resold local service bundled with their long distance, cable television, or wireless service, but that does not mean that stand-alone resale should necessarily be a profitable business. Furthermore, there is no competitive justification for mandated discounts. With mandatory wholesale discounts, particularly if they exceed the actual avoided costs when wholesale rather than retail service is provided (adjusted for any additional wholesale costs that might be incurred), competitive facilities-based carriers may be foreclosed from entering the market, except in certain dense areas where costs are significantly below average.¹²

Competitors often point to the resale experience in the long distance market, but the comparison is completely inapt. In the long distance market, resale of the regulated tariffed services was mandated, but there were no mandated wholesale discounts. Resellers have been free to buy high volume toll services available to high volume retail customers and resell them to groups of smaller customers that the reseller has aggregated. There has never been a policy that required the incumbents to provide discounts off existing retail tariffs. When an incumbent is mandated to provide a percentage discount off a retail rate and to provide that discounted service to a competitor, there is no incentive for the incumbent to reduce its costs of providing service. If the costs go up, regulation will permit a rate increase for the retail customer and the “wholesale” customer. But if the costs of the incumbent go down, the incumbent cannot reduce its retail rate without also reducing the rate charged to the competitor. The competitor, in effect, has a regulatorily guaranteed margin.

¹² To the extent that competitive facilities-based carriers have costs that are lower than the incumbent’s cost, there may be some instances where they are not foreclosed from entering the market even though the incumbent prices below its cost.

Mandated discounts can give the illusion of competition by making it easy for many companies to resell the underlying service of the incumbent, facilities-based carrier. This, however, does not result in a truly competitive market, which would require competing facilities-based carriers. Mandated wholesale discounts may hinder, rather than help, the development of facilities-based competition.

U. S. and Canadian Regulatory Policy and Its Implications

Public Utility Regulation and Antitrust

The major difference between the U.S. and Canadian approaches to these two major local competition issues, mandatory unbundling and resale, can be traced to the difference between public utility regulation and antitrust or competition law. In the U.S., the *Telecommunications Act of 1996* and the FCC's orders implementing the framework for local competition¹³ have as their foundation public utility concepts, even though, as the authors have argued elsewhere, public utility concepts should not be employed for the purpose of developing competition policy.¹⁴ That the U.S. Act finds its intellectual underpinnings in public utility regulation is evident by making a few specific observations. The U.S. Act imposes additional requirements on "incumbents." Those requirements are not explicitly based on a market power analysis; they are based on incumbency alone, and it is the incumbent which is impressed with an obligation to serve competitors through mandated unbundling of anything competitors might demand and through mandated resale discounts. It is the incumbents, also, that are impressed with the obligation to provide "interconnection at any technically feasible point in the network" which, as

¹³ See footnote 3.

¹⁴ Willie A. Grieve and Stanford L. Levin, "Public Policy Implications of Introducing Competition in Public Utility Industries, *Industrial and Corporate Change*, forthcoming.

shown previously, amounts to another way of expressing the rule that everything is to be unbundled.

One could argue that although the Act does not specifically mention the concept of market power as a justification for the imposition of expanded public utility obligations on incumbents (and although it is natural monopoly which justifies public utility regulation, not market power) the Act simply assumes market power. In addition, the concept of market power could be said to be embodied in the forbearance provisions of the Act. Unfortunately, however, that section also misses the point. While it contemplates forbearance where competition has arisen (an unlikely occurrence in the facilities market for the reasons set out below), it applies public utility regulation tests to the analysis of when there might be sufficient competition to justify forbearance. For example, the regulator is to forbear where there is sufficient competition to ensure that rates are “just and reasonable” and not “unjustly discriminatory or unduly preferential.” Those are public utility tests, and the precedents by which they have been tested and applied throughout history have been developed by regulators of public utilities, the same regulators who will be called upon to determine whether competition will produce just and reasonable rates which are not unjustly discriminatory or unduly preferential. Since it is unlikely that competition will ever produce the same outcomes that regulators of public utilities consider to be just and reasonable and not unjustly discriminatory, it is unlikely that regulators, applying their own test, will ever find there is sufficient competition to permit forbearance. The wrong test is specified in the Act and the wrong people are called upon to make the determination.

In Canada, the recent CRTC decision implementing local competition¹⁵ does not make the same mistake as the U. S. Congress and the FCC have made. The Canadian decision is based

¹⁵ Canadian Radio-television and Telecommunications Commission (CRTC), Local Competition, Telecom Decision

on economics and competition law concepts. It recognizes the importance of developing rules that allow facilities-based competition to emerge and uses competition law concepts to do so. There is no expanded obligation to serve competitors. Significantly, also, the Canadian Telecommunications Act (enacted in 1993) does not employ public utility language in its forbearance section. Instead of requiring forbearance where there is sufficient competition to ensure that rates are just and reasonable and not unjustly discriminatory, the Canadian Act deliberately requires forbearance where there “is or will be competition sufficient to protect users.”¹⁶. In Canada, the Commission must ask whether there is or will be competition sufficient to protect users as they would be protected by market forces in competitive markets, not by regulatory forces in regulated markets.

Unbundling

The differences in the fundamental approaches to the introduction of local competition in Canada and the U.S. are also evident in specific policies. In the U. S., the *Telecommunications Act of 1996* requires extensive unbundling of the incumbent’s network,¹⁷ and this unbundling goes well beyond what is required by the essential facilities doctrine. In general, incumbent local carriers are to make available to competitors any part of their network that can technically be offered. This includes loops, switching, transport, signaling, and probably sub-loop elements if they can technically be made available.

CRTC 97-8, May 1, 1997.

¹⁶ *Telecommunications Act of 1996*, Section 34(2).

¹⁷ *Telecommunications Act of 1996*, Section 251(c)(3).

In the U. S., the anti-competitive consequences of this extensive unbundling have been made worse by the pricing requirements. The *Telecommunications Act of 1996* says that these elements are to be made available at incremental cost plus a mark-up to cover shared and common costs,¹⁸ although the recovery of a portion of shared and common costs may not be guaranteed. The FCC, in its local competition order, implements this portion of the *Telecommunications Act of 1996* with a TELRIC (total element long run incremental cost) standard and a promise to recover a portion of the forward-looking shared and common costs.¹⁹ Since TELRICs are hypothetical, rather than any company's actual costs, and because of the actual methodology, they tend to set prices that are below the incumbent company's actual (either in historical or forward looking terms) costs of providing the network elements. Similarly, the forward-looking nature of the shared and common costs means that these, too, may be understated when compared to actual costs. From any incumbent's point of view, then, prices that are based on TELRICs may be below cost. More worrisome, it may turn out that TELRICs are below the actual costs of many or all of the potential entrants. Even though the Court of Appeals has ruled that the FCC does not have the authority to impose this methodology on the states,²⁰ who are ultimately charged with setting the prices for unbundled network elements, many states are setting prices which essential follow the TELRIC methodology.

The result of U. S. policy, established in the *Telecommunications Act of 1996* and the FCC's orders implementing the Act, is that entrants may rely artificially on unbundled elements provided by the incumbents rather than the construction of competing facilities. The mandated

¹⁸ *Telecommunications Act of 1996*, Section 252(d)(1).

¹⁹ FCC 96-325, par. 672.

²⁰ Hansen, Circuit Judge, "Opinion and Order," *Iowa Utilities Board v. Federal Communications Commission, et al.*, On Petitions for Review of an Order of the Federal Communications Commission, Before Bowman, Wollman and Hansen, Circuit Judges, filed on July 18, 1997.

unbundling interferes with the establishment of a competitive market, and the pricing methodology may retard or foreclose the development of infrastructure competition. The U.S. policy may actually serve to entrench monopoly in the networks of the incumbents. As such, the U. S. unbundling policy is actually anti-competitive. Indeed, what is surprising about the policy is that it appears to have been adopted without any consideration of U.S. antitrust principles or of the numerous U.S. court decisions through which the development of the essential facilities doctrine can be traced.

Canada, in contrast, has chosen a significantly different regulatory policy regarding unbundling. Mandatory unbundling in Canada is, with some exceptions, limited to essential facilities. These essential facilities are telephone numbers (central office codes), directory listings which all carriers including new entrants control, and local loops in high cost areas which the incumbent companies offered to treat as essential facilities until more evidence became available. Furthermore, the incumbent companies offered to make available on an unbundled basis a limited number of public service and safety services including 911 Emergency service and relay service. While the Commission was of the opinion that making available certain other unbundled services to competitors, primarily loops in urban areas and transiting between entrants, might facilitate the introduction of competition, the Commission recognized that these services are not essential facilities. As such, then, the Commission ordered that they be made available only for five years.²¹ This approach provides an opportunity for new entrants to enter and establish themselves in the market knowing that the availability of these non-essential facilities is only guaranteed for five years. The incentives for them to construct their own facilities are clearly present, and the incumbents' incentives for research and development are

²¹ CRTC, Telecom Decision CRTC 97-8, par. 86.

only minimally affected. This approach, therefore, avoids nearly all of the problems and anti-competitive consequences evident in the U. S. approach.

In terms of pricing unbundled elements, the Commission in Canada has also taken a more pro-competitive approach. The prices for unbundled elements are based on the incumbent's actual incremental cost,²² and they also include a mark-up of 25% to recover a portion of shared and common costs. This approach avoids many of the pitfalls of the U.S. approach and does not create artificial incentives for competitors to purchase unbundled facilities from the incumbent carriers -- incentives and opportunities which are inconsistent with competitive markets. Furthermore, from a more practical perspective, Canadians resisted the temptation to embark on the development of a brand new, untested and undeveloped incremental cost standard. The CRTC stayed with the incremental cost standard it has developed and employed for almost twenty years. The advantages of this, contrasted with extensive litigation in the U. S. over a new (TELRIC) cost standard, are immense.

Resale

The difference between the Canadian and U.S. approaches is also evident in the case of resale. The *Telecommunications Act of 1996* has mandated the resale of local telephone service,²³ as has the CRTC's Decision in Canada.²⁴ While the simple act of mandating resale of local service itself results in some anti-competitive problems, as discussed above, the major anti-

²² For the pricing of unbundled elements, the Commission used its "Phase II" approach. This is an approximation of long run incremental cost, with some not-great differences resulting from a time period used for the study which may be, in some cases, too short to measure true LRIC, and from a small allocation of shared costs.

²³ Telecommunications Act of 1996, Section 251(c)(4).

²⁴ CRTC, Telecom Decision CRTC 97-8, Section XII.

competitive issue surrounding the resale of local telephone service concerns mandated wholesale discounts. Here there is a significant, and important, difference between the approaches taken in the U.S. and in Canada.

The *Telecommunications Act of 1996* requires that local telephone service be provided on a wholesale basis at a price which reflects the retail price charged by the incumbent less any costs that are avoided by providing the service on a wholesale basis rather than on a retail basis.²⁵ Under some interpretations of this standard, any anti-competitive consequences might have been minor, but the FCC's local competition order makes this situation worse. The FCC has taken the Act's "avoided cost" standard and converted it into an "avoidable cost" standard.²⁶ The FCC's approach is a significant departure from the plain words of the Act. The Act contemplates reducing the retail price by the *actual costs* that are saved in providing wholesale service. There is also some expectation in the Act that any additional costs incurred by the incumbent in providing a wholesale service could be recovered in the price charged for the wholesale service, but the FCC ignored this rather basic concept as well, and the FCC's "avoidable" costs are calculated entirely differently.

The FCC wants to measure all of the costs that can be potentially saved if the incumbent provided only a wholesale service and offered no retail service. For example, under the FCC's avoidable cost methodology, an incumbent might have no marketing expenses for retail service, and thus all of the incumbent's marketing costs should be subtracted from the retail tariff to get the wholesale rate. In the real world, however, the incumbent will be providing both retail and wholesale service; marketing costs may not be reduced at all if the incumbent provides some

²⁵ Telecommunications Act of 1996, Section 252(d)(3).

²⁶ FCC 96-325, par. 911.

wholesale service, so the avoided, as opposed to avoidable, costs may be zero in this case. In any case, it is likely that such costs do not reduce proportionately with an increase in wholesale business. The situation is the same for other costs. Furthermore, there is no apparent provision for the recovery of any additional costs associated with providing wholesale services.

The FCC has further suggested that wholesale discounts of 17-25% are appropriate in the absence of specific cost studies.²⁷ While the Court of Appeals has ruled that the FCC cannot impose such pricing rules for local service on the states,²⁸ many states have imposed such discounts on the ILECs. These discounts, which are larger than most of the resale agreements which had been negotiated prior to the FCC issuing its Order, are not supported by any cost data. The consequence of discounts of this size is that entering the local market by reselling the incumbent's service is economically more attractive than entering by constructing facilities, especially since a margin is guaranteed. This result is anti-competitive. It will hinder if not foreclose the development of a competitive local telecommunications market based on competing network facilities and, like the unbundling provisions of the Act, entrench monopoly in the incumbent's local network.

Canada's policy is in stark contrast to the U. S. resale policy. The Commission recognized that facilities-based competition would be necessary for a truly competitive local telecommunications market to emerge in Canada.²⁹ The Commission rejected mandated wholesale discounts and followed the approach it had established in the toll market, only

²⁷ FCC 96-325, par. 910.

²⁸ Hansen, Circuit Judge. "Opinion and Order." Iowa Utilities Board v. Federal Communications Commission, *et al.* On Petitions for Review of an Order of the Federal Communications Commission. Before Bowman, Wollman and Hansen, Circuit Judges. Filed on July 18, 1997.

²⁹ CRTC, Telecom Decision CRTC 97-8, par. 237.

mandating resale at the retail tariff.³⁰ While market forces may eventually result in avoided-cost-based, market-responsive wholesale discounts based on volume and term commitments, such as are beginning to appear in the toll market, the Commission has not ordered artificial (or regulatorily-imposed) discounts.

Early Consequences

As a result of these wholesale policies, facilities-based competition should emerge more rapidly in Canada than in the U. S., notwithstanding that there were facilities based competitors in the U. S. before passage of the *Telecommunications Act of 1996* to a much greater extent than there were in Canada. Competition through resale in the U. S. will only create the illusion of competition because there will not be competition for the underlying infrastructure.

Recent events are already bearing out this prediction. There are, of course, many factors affecting telecommunications planning in addition to the *Telecommunications Act of 1996* and the FCC's local competition orders. Nevertheless, since the FCC's First Order came out in 1996, the cable companies became much less interested in providing telecommunications services, to the point where there seems to be little activity in this area today. Similarly, AT&T's aggressive plans for facilities-based entry into the local telecommunications market, re-stated as recently as February, 1997,³¹ have been scaled back. In June, 1997, *The Wall Street Journal* reported that AT&T was having problems with its facilities-based local entry strategy and was interested in a merger (since dropped) with SBC, the parent company of Southwestern Bell Telephone Company, currently the largest RBOC, as an easier way to enter the local telecommunications

³⁰ CRTC, Telecom Decision CRTC 97-8, paras. 250 and 252.

³¹ "AT&T Steps Up Its Fight For Local Phone Markets," *The Wall Street Journal Interactive Edition*, February 24, 1997.

market.³² While there are many reasons for this change in strategy, one would not want to ignore the artificial benefits that, in this interval, had been given to local service resellers at the expense of incumbent and potential facilities-based local service carriers.

In Canada, by contrast, the consortium of Canada's largest cable television companies, vision.com, was formed in 1996 to facilitate entry into telecommunications. After the Canadian Radio-television and Telecommunications Commission's May 1, 1997, local competition order, vision.com has rededicated itself to entering the telecommunications market. As recently reported in *Canadian Communications Network Letter*,³³ "this is surely the dawn of the cablecos' foray into providing switched local services." The cablecos intend to offer a nationally branded telephone service and to bundle their services so that a customer has one contact point both for services in several locations and for different types of services.

Conclusions

There are clear differences between the local competition policies selected by regulators in the U.S. and in Canada. U.S. policies make facilities-based competition more difficult, and, as such, may also slow down any moves toward bundling and convergence. In addition, to the extent that U. S. policies slow down the growth of facilities-based local competition, it will also make it more difficult for the BOCs to enter the in-region interLATA toll business, thereby limiting the degree of competition in the toll market as well. Canada, of course, with a policy that does not discriminate against facilities-based competition, will see more competition, more bundling, and more convergence.

³² "AT&T May Lack Resources To Go It Alone on Local Service," *The Wall Street Journal Interactive Edition*, June 11, 1997.

³³ "National Cable Consortium Takes Plunge Into Telephony Via Dedicated Local Services," *Canadian*

These are important differences, and the competitive situation may evolve in substantially different ways in the two countries, even though there is currently more facilities-based competition in the U.S. than in Canada as a result of an earlier lowering of barriers to competition. Now, however, the incentives in Canada favor facilities-based local competition more strongly than do the incentives in the U. S. There is also reason to expect that the Canadian policy can work. New Zealand, for example, without an industry regulator and without mandated resale at any price and without mandated unbundling, is witnessing the development of facilities based competition for both local and toll service.

As the European Union and other countries around the world also strive to develop policies so that they, too, can benefit from increased competition in telecommunications, it will be worthwhile to pay particular attention to the Canadian approach to local competition policy. While the policies in the U.S. may limit the extent of true facilities-based competition, Canadian local competition policy avoids the illusion of competition from the rapid entry of resellers of the incumbent's underlying service. Canadian policy holds out for the real benefits of competition that can only be realized from the presence of facilities-based competitors. It is in this way that consumers in Canada will enjoy all of the benefits of competitive telecommunications markets. Europeans, too, can benefit from real competition if governments and their regulators resist the temptation to follow the Americans into policies of competition based on regulation and, instead, follow the Canadian example of developing competition policy based on the principles of competition law and economics.

Thus, while the Americans slumber under the shade tree created by the Telecommunications Act of 1996 and dream that they have crossed the finish line first by having created the illusion of competition, they will awake one day to discover that the methodical

Canadians, having applied the principles of competition law and economics largely developed in American jurisprudence, have crossed the finish line first.

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