PUBLIC INTEREST ADVOCACY CENTRE

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May 25, 2007

VIA E-Mail AWS@ic.gc.ca

Director General
Telecommunications Policy Branch
Industry Canada
Room 1612A
300 Slater Street
Ottawa, ON
K1A 0C8

Dear Sir:

Re: Notice No. DGTP-002-07 – Consultation on a Framework to Auction Spectrum in the 2 GHz Range including Advanced Wireless Services

We are writing to provide the comments of the Public Interest Advocacy Centre with respect to the above noted consultation document. We understand that there will be an opportunity to reply to any comments received from other parties in the consultation process. We will review the submissions and submit any such reply comments within the timeline specified.

Thank you.

Yours truly,

Original signed

Michael Janigan
Executive Director/
General Counsel

Canada Gazette

Part 1

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Title: **Consultation on a Framework to Auction Spectrum in the 2 GHz Range including Advanced Wireless Services**

Comments of
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Introduction

The Public Interest Advocacy Centre, (PIAC), a non-profit organization with its head office in Ottawa, has been engaged for over thirty years in representing the interests of consumers and, in particular, vulnerable consumers concerning the delivery of important public services. This engagement has included both participating in proceedings of importance in the Canadian Radio-Television and Telecommunications Commission (CRTC, and research and advocacy on telecommunications and broadcasting issues.

PIAC has been previously involved in making submissions on the spectrum auction process. In December 1997, PIAC produced the report "The Inappropriateness of Spectrum Auctioning in a Canadian Context"[1]. The report's conclusions were that the auctioning process was not in the public interest in that it would likely mean less competition, higher consumer prices and reduced societal benefits in the form of job creation and research. The report suggested that not only would auctioning not relieve spectrum scarcity, it might actually worsen it.

It is not our intention to revisit the choice of the auction model to award spectrum, notwithstanding the fact that the 1997 PIAC report was prescient with respect to some of the current perceived deficiencies with wireless services. Our focus, in keeping with the consultation document issued by

[1] Max E. Melnyk, "The Inappropriateness of Spectrum Auctioning in a Canadian Context" PIAC, December 1997

Industry Canada in February of this year, is on the achievement of telecommunications policy objectives as set out in the *Telecommunications Act.* As well, we are cognizant of the findings of the Telecommunications Policy Review Panel Report both in relation to its assessment of the state of the Canadian market for wireless services[2] and in terms of its support for a combination of market-based measures for spectrum management coupled with strategic use of regulatory mechanisms.[3]

PIAC intends to address issues in play in the design of the AWS spectrum auctioning process associated with the measurement of public benefits, the adequacy of current competition, the most efficient use of spectrum, and safeguards that may be necessary to prevent market failure. Thus, objectives of competitive efficiency and ensuring the delivery of reliable and affordable wireless services of high quality predominate in our discussion. PIAC does not, at least in this round of submissions, intend to comment upon the Technical Considerations set out elsewhere in the consultation document.

Public Benefits

There would appear to be some degree of confusion that has arisen in the context of the public debate concerning the characterization of any displacement of auction rules that award the spectrum to the highest bidder. Such efforts to introduce considerations apart from ordinary qualifying criteria have been termed an unwarranted intrusion into the market, and the creation of a subsidy in favour of some players rather than others. With

[2] The TRPR noted that "Canada's mobile wireless industry lags behind its major trading partners on a number of key measures" (Page 1-21)
[3] Ibid Recommendation 5-9

respect, this confuses the auction process with the operation of the competitive market.

It is true that the auction process is designed to extract the maximum payment from licensees for the use of spectrum. It is believed by the government that this process returns "appropriate compensation to Canadian taxpayers for the use of a public resource"[4]. While the size of the compensation paid is readily measured, the other objective that is put forward for the auction promotion of "economically efficient use of spectrum" is decidedly more difficult to measure.

Clearly, the spectrum payment becomes an essential input that becomes priced through a system that is designed to maximize the cost of the input. There are no substitutes for the input available in the market, and there is no guarantee that the successful bidder's business plan actually makes the most efficient use of spectrum. The award of spectrum to the highest bidder simply means that the plan will recover the costs of the payment either through service offerings, resale or simply locking up scarce resources for the period of the license.

Unfortunately, there is no connection between the compensation that may be paid by the highest bidder, and any decrements in competition, innovation, service quality, accessibility and pricing that may result from use of the spectrum which, while economically advantageous to the highest bidder, may be inefficient on a system wide basis. It will be Canadians as customers that bear the cost of the inefficiency aforesaid (and possibly the taxpayers

[4] Consultation document Para 5.1

ultimately if the viability of the wireless industry suffers in the result). While there is competition in the auction process, that process is no guarantee of competition and the improvements that come from competition after the auction is won. It is also appropriate to note that payments derived from the auction process do not directly benefit the wireless market, but go to improving the financial circumstances of the government.

That having been said, PIAC is well aware of the pitfalls associated with programs to assist competition by assisting competitors. Our experience in telephony led to the conclusion that there was no price too large that consumers had to pay in order to ensure that competition took place that could possibly lower the prices again. Ratepayer-financed discounts to competitors for digital access, payments for local portability costs and local rates inflated to incent entry drained billions from the pockets of ordinary residential consumers without any corresponding market-driven rate reductions or significant competitive entry until recently.

So while Industry Canada should not complacently assume that the highest compensation provides the best value for Canadians, it must also be careful to ensure that any adjustments to rules have a payback that justifies departure from the highest bidder model. This does not mean that all such potentially offsetting benefits must be monetized in any modified auction process, but at a minimum they must have the capability of achieving a result that distributes benefits to Canadians that exceed any revenue foregone through the adoption of new rules.

Adequacy of Competition

PIAC has been critical of recent developments associated with the watering down of the test for forbearance from regulating local telephone service accomplished by government order. This criticism came about in part from the assessment of the ability of competitors in the market to provide adequate discipline of incumbent providers in the situation envisioned in the minimum requirements for forbearance. It is not necessary to ventilate those concerns in the context of considerations of competition in the market for AWS. Whatever, the view associated with minimum conditions for forbearance in the local telephony market, the goal here is to maximize competitive efficiency in an otherwise deregulated market. This is not simply a question of whether there is a need for regulation; it is whether the market could work better if spectrum was allocated in a particular fashion. A brief review of the current operation of the market for wireless services in Canada is thus opportune when considering possible market improvements.

The consultation lays out some salient features of the current wireless market:

> According to Statistics Canada's latest survey, the number of wireless telephone subscribers has now surpassed local access lines and the annual revenues for wireless telephony have exceeded those derived from the local wireline telephone service. According to the Canadian Radio-television and Telecommunications Commission (CRTC), Canada has a wireless infrastructure that serves 97% of the population with coverage along most primary highways and to about 20% of its geography.

However, it is clear that there has been significant criticism of the performance of the wireless industry in Canada. The TRP report referenced earlier cast a worried look at the Canadian wireless industry citing perceived decrements in performance associated with penetration, pricing, and usage:

> In the Panel's view, there is relatively little to be gained by focusing on historical differences between the performance of the wireless industry in Europe and North America. Canada's most important comparator is the United States, because of our similar geography, demographics and telecommunications markets, and because the United States is our principal trade partner and competitor. Additionally, the U.S. and Canada have historically adopted comparable approaches to pricing wireless services and have followed one another closely in the deployment of new services and technologies. Nevertheless, an examination of the growth of wireless in the United States and Canada reveals a persistent and growing gap between the rates of the two countries.
>
> In addition to having lower mobile wireless penetration than the U.S., Canada has much lower usage of wireless services. Merrill Lynch estimates that Canadian usage is approximately 52 percent of the average U.S. usage, measured in minutes of use (MOU) per month.[5]

Other analysts have been more trenchant in their criticism. The Seaboard Group, in its 2007 report entitled “Lament for a Wireless Nation” concluded, “Canadian wireless adoption is a national disgrace”. The report concludes that the average cell phone bill is one third more in Canada than in the United States and although the price gap is closing, it continues to hinder the adoption of wireless communication in this country.[6]

[5] FCC, Sixth Annual CMRS Competition Report, Thomas Sugrue, Opening Remarks, June 20,2001
[6] Simon Avery, “High Fees leave Cell phones on Hold, Globe and Mail March 8, 2007

The Lemay/Yates Associates Report of September 2006, commissioned by MTS Allstream, was similarly critical of wireless industry performance principally in areas of penetration and price:

> Canada's lower penetration can be translated into a penetration "gap" relative to the other countries – expressed in years behind. Relative to the US, by the end of 2005 the gap was about 2.25 years. Relative to the UK, Canada has declined steadily to 2005 when the penetration gap was 6.5 years.
>
> There can be arguments as to why Canada could be "behind" in development of mobile services – less dense population, slower to issue licenses, etc. But there does not appear to be any evidence that Canada is going to catch up, or close the gap relative to the other countries, any time soon. Canada appears to be remaining staunchly behind.[7]

Lemay-Yates concludes that lower competitive rivalry between cell phone providers is providing less value to Canadians:

> Lower competitive rivalry keeps demand lower. With less market stimulation there is less interest in the services and increases in pricing. With the consequent lower usage, investment may also suffer.[8]

Not surprisingly, incumbent wireless providers dispute the dismal findings. One analyst, working on behalf of the Canadian Wireless Telecommunications Association of Canada has surveyed existing country usage and come up with conclusions that are, at least, directionally at odds with the views previously detailed:

[7] Lemay-Yates Associates Inc., "Mobile demand and service pricing in Canada", September 25, 2006 p. 6
[8] Ibid atp.7

> Comparing mobile wireless service prices across carriers as well as countries is a complex task given the numerous rate elements and usage considerations involved. Bearing this caveat in mind, we found that mobile wireless service price data across all 30 OECD countries suggest that Canadian mobile wireless rates have consistently compared favourably. Relative to the U.S, Canadian mobile wireless rates also compare favourably, except in the case of high volume users. However, virtually all OECD countries do not compare favourably with the U.S. in this area.
>
> A recent SeaBoard Group wireless pricing comparison study shows that Canada compares favourably with Germany, Sweden, the U.K. and the U.S. for low call volume users, but not for "average" users. However in our opinion, the "average" user, as defined this study, should more accurately have been labeled a "high" volume user. Consequently, the fact that the U.S. was found to have the lower rates for high volume users compared to Canada was not surprising. Had the SeaBoard Group study been broader in scope, as in the case of existing OECD pricing studies, we expect that Canada would have compared favourably for a true "average" user of wireless services. [9]

The Consultation paper of February 16, 2007, describes the oversight that has been, and is still provided by the Competition Bureau over competition in wireless markets. The paper also correctly notes the difference in approach associated with the perspective of Industry Canada in potentially enhancing competition and facilitating market entry in the spectrum auctioning process and that of the Competition Bureau in the merger approval process:

[9] Wall Communication Inc., "A Study of the Wireless Environment in Canada" , September 2006

> Although the goals of merger policy are similar to those underlying set-asides and aggregation limits, there is a fundamental difference between the two that needs to be recognized. The goal of using set asides and aggregation limits is intended to address concerns that new entrants have the opportunity to bid, as part of the competitive process, for the spectrum necessary for entry as a facilities-based carrier. In a review of a merger matter, the Bureau inquires into whether the merger is likely to cause a substantial lessening or prevention of competition relative to the circumstances that would be expected to prevail in the absence of the merger. In particular, a Bureau decision not to challenge a transaction should not be interpreted as a conclusion that the merging parties, or other firms in the affected industry, did not possess market power or that further profitable entry into the industry was not possible. It simply means that the Bureau determined that the merger would not likely increase the level of market power sufficiently to cause a competition concern relative to the pre-merger situation. As such, a Bureau decision not to challenge a merger should be viewed independently from a Department policy decision of using set-asides, aggregation limits or other measures designed to provide an opportunity for new entry to facilitate a more competitive market over what may currently exist.[10]

PIAC has been intensely critical of the seeming indifference to consumer welfare that has been demonstrated by the Bureau in its approval of the Telus/Clearnet and Rogers/Microcell mergers. It is far from clear that any efficiencies associated with these mergers have worked for the benefit of anything other than shareholder enrichment. Anecdotal evidence appears to indicate such mergers have diminished the effectiveness of the formerly independent wireless operators from offering innovative services. As well, while our approach is now to officially consider wireless as a competitor to wireline services for the purpose of local telephone service forbearance, our

[10] Consultation Paper, p. 18

facilities based wireless providers are all wire line providers of service. This can scarcely be described as the ideal.

However, it is PIAC's view that Industry Canada need not be bound by a view that seeks to sanctify one of the opposing analyses of the way in which the current wireless market is working. Its focus should rather be on what may improve the overall industry-wide benchmarks, in relation to price, quality, service innovation and penetration. We would suggest that the current governance wisdom, reflected in legislation and policy, seems to argue for a strategy of increased competition to effect such improvements.

Such a strategy is not without some evidence as to its possible outcomes. In proceedings commenced by CRTC Telecom Notice PN 2006-12, PIAC introduced evidence on behalf of Consumer Groups that showed the positive effect on price and penetration of having a number of competitors that was closer to a norm ordinarily expected for workable competition outside of the telecommunications industry. Dr. Robert Loube, a former F.C.C economist and currently Director of Research with the Washington based Rhoads and Simon consultants firm set out in his Comments, his observations concerning the U.S. Cellular markets:

17. The U.S. cellular markets were first established as duopolies, of which one firm was the local wireline incumbent. Over time, the FCC auctioned off additional spectrum, and, at first, limited the amount of spectrum that any one carrier could own per market. The combination of these auctions and ownership rule produced many markets that were eventually served by five or more carriers. Figure One provides a comparison of the percent of the U.S. population compared to the

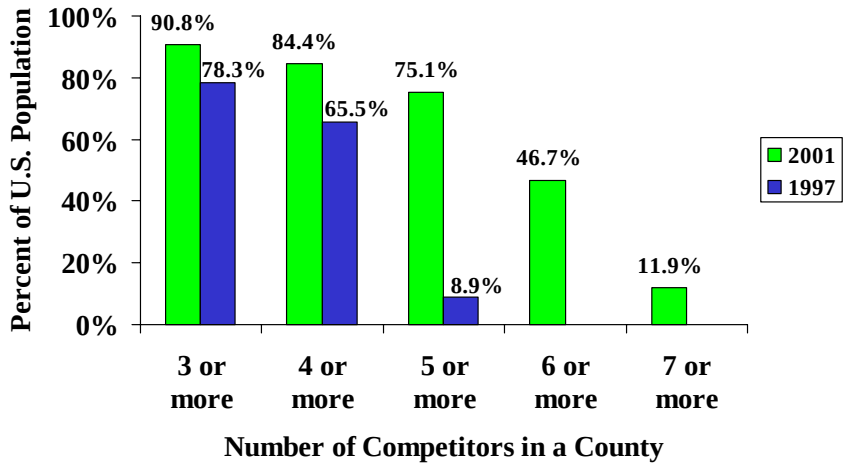
number of mobile telephone carriers at two moments in time.[11] By 1997 the percent of the population served by three or more carriers was already high at 78.3 percent, but the percent of population served by five or more carriers was only 8.9 percent. By 2000, the percent of the population served by three or more increased to 90.8 percent and the percent of population served by 5 or more carriers had dramatically increased to 75.1 percent. The increase in the number of carriers is directly related to the decrease in the price per-minute for wireless service. As Figure Two shows, this price peaked in 1993 at 58 cents per-minute.[12] It gradually decreased with the expansion of the number of carriers through 1997. However, in the period between 1997 and 2000, the price decreased by half from 43 cents per-minute to 21 cents per-minute. This decrease directly corresponded to the increase in the number of carriers.

18. The wireless experience matches Dr. Bauer's contention that effective competition requires five or more competitors, and that the dominant firm should not have more than a 50 percent share of the market.[13] When there is duopoly, the dominant firm's share varies from 50 percent to 100 percent. The wireless industry, because it was established as a duopoly, started with a dominant firm share of no less than fifty percent. Currently, most U.S. local markets are characterized by HHI values of between 2000 and 4000, or between 3.33 and 2.5 effective competitors. When the market loss is only 25 percent, the HHI must be above 5,625 (75 times 75), and when the market loss is 30 percent, the HHI must be above 4,900 (70 times 70). There are only eight U.S. cellular markets with an HHI above 4,900 and only seven U.S. markets with an HHI above 5,625 out of the 172 Economic Areas reported by the FCC.[14] The vibrant price reductions experienced by the U.S. cellular markets are due to the low HHIs, which in turn were generated by the U.S. auctions and the rules regulating market share. That market experience indicates that market share loss threshold of 25 percent may be too low. Price decreases did not occur when there only two carriers. It was necessary for three,

[11].
[12] Id.
[13] Johannes M. Bauer, Statement on Behalf of the Consumer Groups, June 22, 2005, CRTC PN 2005-2, ¶77.
[14] FCC, The Eleventh Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services, WT Docket No. 06-17, FCC 06-142, Appendix A – Mobile Telephone Tables, Table 3: Economic Area Penetration Rates, released September 26, 2006.

four and five or more entrants to become active in a market before a significant price decrease occurred. If the Canadian wireline markets are left with only two major players, the incumbent and the cable provider, a market share threshold of 25 percent would not indicate competition. In those situations, it is necessary to reduce the threshold to at least 30 and probably to 40 percent before effective competition will exist.

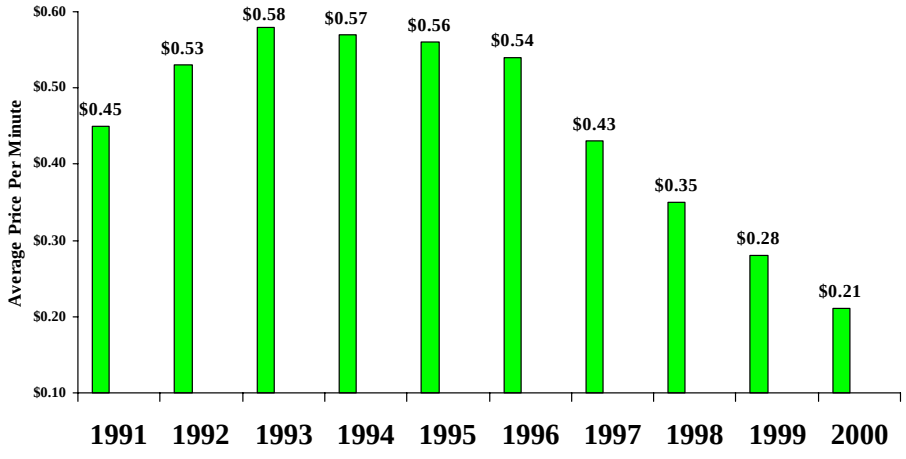
Figure One: Mobile Telephone Competition



Market Structure and Network Issues 10

Source: Federal Communications Commission

Figure Two: Average Price Per Minute for Mobile Telephone Service



Source: The Strategis Group, 2001

It is difficult for consumer representatives to contend for a public policy that would be potentially limiting for new entrant competitors. In our view, Industry Canada must structure the spectrum auctioning process to give viable new entrants an opportunity to show that they can provide spectrum use that can drive the creation of public benefits through their service offerings. Such an approach may militate for the careful use of such tools as set-asides and spectrum caps to effect the objectives desired. It may also be appropriate to examine the desirability of spectrum access rules.

Efficient Use of Spectrum/Safeguards

In addition to concerns about excessive aggregation of spectrum in the hands of too few providers, Industry Canada's spectrum auction policy must address the potential for other inefficient use of spectrum based on either hoarding or lack of competence, financial or otherwise. As we have seen, the design of a competitive wireless service market with multiple non-affiliated players can be easily frustrated by aggressive merger strategies, particularly by incumbent vertically integrated stakeholders. As the consultation paper notes, the Competition Bureau's merger control will not be a panacea.[15]

The consultation paper also calls for a productive secondary market. Clearly access to unused spectrum by third parties would be beneficial in both encouraging the development of new services, and in creating potential efficiencies to drive down costs/prices. While the reluctance to intervene to ensure the successful establishment of secondary markets may be understandable, it runs counter to the collective experience in access to essential service in global utilities. As well, the consultation paper notes:

> An effective market calls for the reduction of barriers to entry and a productive secondary market. Ensuring that the spectrum is put to use, and having clear and effective enforcement mechanisms, will support reliance on secondary markets rather than government intervention. It is the Department's belief that establishing firm implementation rules, with clear and simple consequences for non-compliance, will encourage licensees to use the spectrum or establish commercial arrangements with third parties for the use of the spectrum, rather than risk losing the license due to non-compliance.[16]

[15] Consultation paper p. 21
[16] Consultation paper p. 34

With respect, the existence of “a death penalty” for licensees will do little to compel appropriate behavior with respect to dealings in the secondary market. It is our view that it cannot be assumed that the availability of rental revenue for spectrum will be a sufficiently strong driver to compel straightforward dealing between spectrum licensees and third party service providers.

Similarly, any strategy to enhance competition must not be thwarted by the ability of licensees to merge their spectrum holdings to abate the positive effects of competition. At a minimum, there must be provisions to require divestiture in the event the spectrum is awarded to an existing holder of spectrum, who then consummates a merger with a fellow incumbent. Our preliminary view is that aggregation caps for providers and affiliates should be considered.

Conclusions

The Public Interest Advocacy Centre does not believe that Industry Canada will obtain sufficient benefits for Canada in its spectrum auctioning process by reliance on the bid process alone to achieve its important objectives. PIAC believes Industry Canada must proceed on the basis that it must create the conditions for market optimization in a way that is effective and minimally intrusive, but provides a safety net to prevent a one-sided use of public resources in the form of spectrum.

Dated at Ottawa this 25th day of May, 2007.