



**PUBLIC INTEREST ADVOCACY CENTRE**

**LE CENTRE POUR LA DEFENSE DE L'INTERET PUBLIC**

ONE Nicholas Street, Suite 1204, Ottawa, Ontario, Canada K1N 7B7

Tel: (613) 562-4002. Fax: (613) 562-0007. e-mail: [piac@piac.ca](mailto:piac@piac.ca). <http://www.piac.ca>

February 28, 2011

**VIA E-Mail: [Spectrum.Engineering@ic.gc.ca](mailto:Spectrum.Engineering@ic.gc.ca)**

Manager  
Mobile Technology and Services  
DGEPS  
Industry Canada  
Room 1612A  
300 Slater Street  
Ottawa, ON  
K1A 0C8

Dear Sir:

**Re: Notice No. SMSE-018-10 – Consultation on a Policy and Technical Framework for the 700 MHz Band and Aspects Related to Commercial Mobile Spectrum**

We are writing to provide 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 I**

**Publication Date:** November 30, 2010

**Title:** Consultation on a Policy and Technical Framework for the 700 MHz Band and Aspects Related to Commercial Mobile Spectrum

**Comments of  
the Public Interest Advocacy Centre  
(PIAC)**

**1204 – ONE Nicholas Street**

**Ottawa, ON K1N 7B7**

**(613) 562 – 4002 (phone)**

**(613) 562 – 0007 (fax)**

**[mjanigan@piac.ca](mailto:mjanigan@piac.ca)**

## **Executive Summary**

PIAC submits that the auction process associated with the 700 MHz Band must address more than simply the goal of obtaining the highest price for the use of the spectrum. Policy makers must be cognizant of the current deficiencies associated with the mobile wireless market in Canada and the necessity to ensure that the spectrum is also used in a fashion that is optimal for meeting all the national telecommunications and broadcasting goals. This includes the use of set -asides to encourage new entrant competition, as well as to meet other public safety demands and spur innovative community based broadcasting initiatives. Finally, PIAC also urges that a fund be established to meet needs not addressed by commercial providers, through independent research and implementation of access-oriented policies.

## **I. Introduction**

The Public Interest Advocacy Centre, (PIAC), a non-profit organization with its head office in Ottawa, has for over thirty years been engaged 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 previously been 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.”<sup>1</sup> The report’s conclusions were that the auctioning process was not in the public interest as the bid process alone would likely cause less competition and higher consumer prices and would not relieve spectrum scarcity. When the auction process proceeded, PIAC’s concerns turned to the need for due structures, safeguards, and processes by which the auction could operate to best achieve the public interest and the policy objectives of the *Telecommunications Act*.<sup>2</sup>

In May 2007, PIAC submitted comments to Industry Canada with respect to the Consultation on a Framework to Auction Spectrum in the 2 GHz Range Including Advanced Wireless Services. PIAC advised that Industry Canada would not obtain sufficient benefits for Canada in its spectrum auctioning process by reliance on the bid process alone. PIAC advocated for the creation of effective and minimally intrusive conditions for market optimization that would provide a safety net to prevent one-sided use of public resources in the form of spectrum.

In 2008, Industry Canada recognized that a bid process alone would not promote competition, as it would not allow new entrants into the market. As such, the auction was structured to include a set aside for competitive bids by new entrants only. The same is true today: maintaining a competitive wireless sector cannot be achieved by an auction process in which only the highest bidders can compete. A set aside must be structured into the auction process for competitive bids by new entrants and smaller players only.

---

<sup>1</sup> Max E. Melnyk, “The Inappropriateness of Spectrum Auctioning in a Canadian Context,” PIAC, December 1997.

<sup>2</sup> *Telecommunications Act*, S.C. 1993, c. 38 [The Act].

PIAC proposes a set aside of 25% for new entrants and smaller players to meet the objective of maintaining and continuing market competition. PIAC also echoes other parties' proposals that the auction be structured to include a "use it or lose it" rule, to ensure the 700 band is not merely bought up by larger competitors to prevent smaller competitors from accessing it. Additionally, because the market alone cannot provide for all needs of Canadians, PIAC recommends further measures to protect and promote public uses of spectrum. These measures include a set aside of 25 MHz for public and priority uses and a reservation of 10 MHz for innovation. Finally, PIAC advocates for the consideration of open access spectrum and the apropos funding of public and consumer interest work from the proceeds of the spectrum auction. These recommendations will be addressed in turn.

## **II. Maintaining and Continuing Market Competition**

In 2008, a full 92% of the wireless TSP's subscriber market share was held by Rogers, Telus and Bell. In 2009, that market share increased to 95%. Similarly, in 2008, a weighty 94% of the wireless TSP's revenue market share was held by Rogers, Telus and Bell. In 2009, that market share increased to 95%.<sup>3</sup>

As a result of the 2008 set aside, competition in the wireless market is beginning to increase with WIND, Public Mobile, and Mobilicity rolling out wireless services in 2009 - 2010. The benefits to the public, while only very recent, are noteworthy. Wireless plans and service offerings are increasing and diversifying and now provide choices for consumers to avoid burdensome long-term contracts and hefty

---

<sup>3</sup> CRTC, "Communications Monitoring Report," 2010, section 5.5 at page 158 [CRTC 2010].

cancellation fees. Correspondingly, prices for consumers are decreasing.<sup>4</sup> In the past year, Canada has reached the important feat of having five or more competitors in the market, a recognized industry benchmark of more effective market competition.<sup>5</sup>

However, that being said, the wireless market in Canada is still less competitive than in other countries, indicating a continued need to protect and foster the ability of new entrants to compete in the current market oligarchy. The average monthly price of wireless services is less competitive than in the United Kingdom, Australia and Japan.<sup>6</sup> In comparing international cell phone plans and prices for post-paid voice services and pre-paid voice services, Canada is consistently less competitive than the US and the UK.<sup>7</sup>

While new entrants are beginning to challenge subscriber and revenue market strongholds, they are still in their infancy and face considerable threats of being bought out<sup>8</sup> or pushed out<sup>9</sup> of the market. In order to maintain any competitiveness in the wireless market now and in the future, these new entrants must be able to access the 700 MHz band spectrum. It is necessary to structure an

---

<sup>4</sup> To compete with the arrival of the new entrants, Rogers launched Chatr and Bell relaunched Solo Mobile, both with unlimited talk and text plans with prices similar to those offered by the new entrants. Rogers and Bell have not offered unlimited talk and text plans except recently through their discount brands Chatr and Solo Mobile.

<sup>5</sup> Johannes M. Bauer, Statement on Behalf of the Consumer Groups, June 22, 2005, CRTC PN 2005-2 at para. 77.

<sup>6</sup> CRTC 2010, *supra*, note 3, section 6.1 at p. 164.

<sup>7</sup> Chieh-yu Li and Bincy Ninan-Moses, "An International Comparison of Cell Phone Plans and Prices," New America Foundation, 2010, available at

[http://newamerica.net/publications/policy/an\\_international\\_comparison\\_of\\_cell\\_phone\\_plans\\_and\\_prices](http://newamerica.net/publications/policy/an_international_comparison_of_cell_phone_plans_and_prices).

<sup>8</sup> As a recent example in Canadian telecom history, Microcell hit financial difficulties as a new entrant and was bought out by Rogers. There is speculation that Wind may face the same threat, not because of financial difficulties, but because of difficulties surrounding Canadian ownership and control requirements.

<sup>9</sup> The Competition Bureau has recently begun legal proceedings against Rogers to stop what the Bureau has concluded is misleading advertising of Rogers' Chatr discount cell phone and text service. Melanie Aitken, Commissioner of Competition is quoted as saying "The [2008] spectrum auction was intended to enhance competition in the wireless sector...New entrants attempting to gain a foothold in the market should not be discredited by misleading claims made by their competitors," see <http://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/03316.html>.

auction process whereby all stakeholders are able to participate in acquiring this fundamentally public resource, in order to allow new entrants to survive and stabilize in the wireless market.

It is trite to point out that no auction process is neutral. The structure of the auction will either facilitate the participation of only the highest bidders, or it will facilitate the participation of all important stakeholders. Because structuring the auction process is itself a value-laden exercise, the structure of the auction itself must be carefully chosen to reflect the values of all stakeholders - the public, the government, and large and small players - and must provide all stakeholders the ability to access this important public resource.

### **Set aside for new entrants and smaller players**

As such, PIAC requests a minimum set aside of 25% for new entrants and smaller players to be structured into the auction. This would encourage competitive bidding because these integral players could bid aggressively against each other, without the impossible hurdle of bidding against “the big three.” Other salient benefits include the following:

First, structuring the auction to include the 25% set aside would allow new entrants who are currently only in certain major cities the capacity to grow into tier 1 spectrum users, promoting competition and promoting more efficient use of spectrum.

---

Second, promoting wireless competition in this way would help alleviate strain on wireline and could alleviate the need for usage based billing. As more people are subscribing to wireless services, and as competition brings more data and service offerings for consumers, fewer people retain wireline services.<sup>10</sup> The transition to wireless will mean less “congestion” on wireline and may allow wireline services to provide what consumers are demanding – freedom from data caps and usage based billing.

PIAC recommends adoption of auction and post-auction rules that ensure the effectiveness of the 25% set aside and prevent parties from undermining the goals of the auction process. Anti-competitive post-auction market behaviours that would undermine the competitive and efficient use of spectrum should be prohibited by all necessary measures, including the following:

### **Restrictions on Dealing**

Successful bidders on the set-aside spectrum should not be allowed to lease, transfer, exchange, or share this spectrum with an incumbent carrier during the term of its lease.

### **“Use it or lose it” rule**

PIAC advocates for the adoption of a “use it or lose it rule.” This rule is key to enforcing competition and efficiency in the post-auction market. While not a

---

<sup>10</sup> Organization for Economic Co-operation and Development, “Communications Outlook 2009,” at [http://www.oecd.org/document/44/0,3343,en\\_2649\\_34225\\_43435308\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/44/0,3343,en_2649_34225_43435308_1_1_1_1,00.html). The OECD reports “a significant substitution from fixed-line to wireless networks, resulting in a decline in the number of fixed-line subscribers” at pp 29-30.

customary measure imposed by Industry Canada, the “use it or lose it” rule is essential for the 700 MHz band. First, the 700 band is prime spectrum uniquely suited for wireless technology, the largest growing market in telecommunications. Second, the efficient and competitive use of the 700 band will determine the competitiveness of the wireless market in the immediate future. The use it or lose it rule would still necessitate an accompanying prohibition on the transfer or sale of spectrum in order to ensure that no party could circumvent the rule, or skirt potential caps should those be introduced.

### **III. Public Uses**

#### **Public Uses set aside**

Because the market alone cannot provide for various needs of Canadians, minimally intrusive measures are necessary to protect and promote public uses of spectrum. PIAC requests that a minimum 25 MHz of spectrum be set aside for public uses in order to meet the needs of the public and the objectives of the *Telecommunications Act*.<sup>11</sup>

This request is in keeping with Industry Canada’s own recognition of the importance of protecting public uses from the impossible burden of competing in the commercial market to acquire spectrum. As per Industry Canada’s Framework for Spectrum Auction in Canada, at guideline 2.2.2, “priority users will not have to participate in an auction to acquire the frequencies...that they require for carrying out their operations. These users include those whose radiocommunications systems are vital to national sovereignty and defence, law enforcement, public

safety, and emergency services.”<sup>12</sup> Public spectrum must be preserved for the public.

It is well known that the 700 MHz spectrum is highly sought-after for its ability to penetrate buildings and reach greater distances with less base equipment. This makes the 700 MHz band ideal for public uses, as public uses require the most economical, most efficient, and most reliable spectrum to protect the Canadian public.

While the Framework mentions priority uses including, *inter alia*, law enforcement, public safety, and emergency services, there are multiple other public uses which are vital to Canadians and which must fall under the rubric of “priority users.”

Specifically, the market alone cannot provide for public uses such as by libraries, school bus systems, snow removal, and similar non-emergency priority community needs. These priority users must also be able to access to spectrum outside the auction process by means of the 25 MHz set aside.

While the Act emphasizes the importance of making services accessible in rural areas, in all regions, and responding to the social requirements of users,<sup>13</sup> certain obstacles block the ability of rural, smaller and cultural communities and municipalities from accessing telecommunications. As has been said, the public cannot afford to compete for a market share of spectrum. These priority users must

---

<sup>11</sup> *Supra* note 2.

<sup>12</sup> Industry Canada, “Spectrum Management and Telecommunications Policy: Framework for Spectrum Auctions in Canada,” October 2001 [the Framework].

<sup>13</sup> *Supra* note 2 at s. 7(b),(h).

also be able to access to spectrum outside the auction process by means of the 25 MHz set-aside.

In addition to leaving behind rural and cultural communities, the market can also fail urban communities. The City of Fredericton's need to design and administer its free wireless internet infrastructure demonstrates the necessity of communities being able to provide an alternative for the public when the market has failed them.

The *Telecommunications Act* also emphasizes the role of telecommunications in maintaining Canadian identity and sovereignty.<sup>14</sup> Like water, public parks, and other natural resources, spectrum is central to Canadian identity and sovereignty. Spectrum, as a public resource, cannot and should not be reduced to a mere commodity, sold to the highest bidder. The U.S. has recognized the need to protect prime 700 band spectrum, setting aside 24 MHz for public uses. Similarly, Canada must protect public spectrum by setting aside as much spectrum as necessary. At a minimum, this is 25 MHz.

### **Innovation reservation**

In addition to the 25 MHz set-aside for public and priority uses, PIAC supports other parties' requests for a reservation of 10 MHz of spectrum for the stimulation of research, development and innovation in telecommunications and other industries in Canada.<sup>15</sup> The reservation would be used by those proving innovative purposes and uses including colleges, universities, community initiatives, and research programs among others. It must be kept in mind that the market cannot

---

<sup>14</sup> *Ibid.*

<sup>15</sup> *Ibid.* at s.7(g).

provide for non-commercial innovations and that current commercial applications are not necessarily representative of the full possibilities of using spectrum in accordance with national objectives. Thus, the government must not be short-sighted in auctioning off public resources when there are technologies, innovations and uses not presently anticipated, from which Canadians should not be precluded.

#### **IV. Other considerations**

##### **Open Access**

PIAC notes the interest in some quarters in open access spectrum and believes that the concept presents opportunities for innovation and achievement of the objectives of the *Telecommunications Act* and the *Broadcasting Act*. PIAC submits that Industry Canada should consider steps that would consider the desirability of a transition toward an open access spectrum in the future.

##### **Funding for public interest concerns**

While spectrum auctions cannot address all decrements in meeting national telecommunications goals, PIAC notes the wisdom in setting aside some small portion of funds derived from the auction process to addressing public interest issues that are directly related to the use of spectrum. This may include funding independent research on issues associated with digital literacy, community and consumer access, and programming for national needs and innovation or implementing programs to accomplish the same.

In this way, the government may gain an invaluable resource that would assist in the iterative development of ways to meet the digital economic strategy. The public revenues from the auction provide a crucial opportunity to resource this potentially important work that might otherwise go unfunded and likely not accomplished. The industries most directly involved in the spectrum auction (wireless and internet providers) are largely forborne, making it essential that sufficient independent assistance is available to protect and advocate for the public interest in the formulation of public policy for these industries.

## **V. Conclusion:**

The objectives of increasing, maintaining, and continuing market competition are best met by structuring the auction to provide for all players to participate. Additionally, maintaining post-market competition is best met by structuring a “use it or lose it” and restraints on dealing in set aside spectrum rule. Further, certain needs of Canadians can best be met outside the commercial market by way of a set aside of 25 MHz for public and priority uses and a reservation of 10 Mhz for innovation. PIAC urges that Industry Canada consider the advisability of open access spectrum. Finally, PIAC advocates the consideration of the creation of a fund to address unmet needs associated with matters of public interest in the use of spectrum. This would include independent research and implementation of programs that address gaps not being met by commercial service providers. These measures will help to ensure continued balancing of the rights of all participants in the wireless market, and assist the government in determining public policy.

\*\*\*\*